

KENNETH C. BALDWIN

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Also admitted in Massachusetts  
and New York

September 23, 2022

Melanie A. Bachman, Esq.  
Executive Director/Staff Attorney  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification  
54 Waterbury Road, Prospect, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains a wireless telecommunications facility at the above-referenced property address (the “Property”). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. Cellco’s use of the tower was approved by the Siting Council (“Council”) in September of 2006 (EM-VER-115-060810). Cellco did reach out to the Town of Prospect in an effort to obtain copies of local approvals for the existing tower. The Town indicated, by email, that it was unable to locate the original tower approval. Included in Attachment 1 is a copy of the Council’s EM-VER-115-060810 approval and the Town’s email correspondence regarding the original tower approvals.

Cellco now intends to modify its facility by replacing nine (9) of its existing antennas with six (6) new NHH-65B-R2B antennas and three (3) new Samsung MT6407-77A antennas on its existing antenna platform. Cellco also intends to remove three (3) remote radio heads (“RRHs”) and install six (6) new RRHs on its existing antenna platform. A set of project plans showing Cellco’s proposed facility modifications, new antennas and RRHs specifications are included in Attachment 2.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Prospect’s Chief Elected Official and Land Use Officer.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing tower.
2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A Cumulative Power Density table for Cellco's modified facility is included in Attachment 3. The modified facility will be capable of providing Cellco's 5G wireless service.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation and antenna mounts, with certain modifications, can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4.

A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 6.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Melanie A. Bachman, Esq.  
September 23, 2022  
Page 3

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth C. Baldwin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth C. Baldwin

Enclosures

Copy to:

Robert Chatfield, Prospect Mayor  
Mary Barton, Land Use Inspector  
Charles and Averyll Bradshaw, Property Owner  
Aleksy Tyurin, Verizon Wireless

# **ATTACHMENT 1**

**Archived:** Thursday, September 22, 2022 7:48:51 AM  
**From:** [Egor Evsuk](#)  
**Sent:** Wed, 21 Sep 2022 18:27:03 +0000ARC  
**To:** [Mayo, Rache](#); [Baldwin, Kenneth](#)  
**Subject:** Fwd: 54 Waterbury Rd / Prospect North CT  
**Sensitivity:** Normal

---

Rachel,  
FYI on request for original approvals for the Prospect North CT tower.  
Thanks

Get [Outlook for iOS](#)

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**From:** Rosalyn Moffo <[rmoffo@townofprospect.org](mailto:rmoffo@townofprospect.org)>  
**Sent:** Wednesday, September 21, 2022 2:20 PM  
**To:** Egor Evsuk  
**Subject:** 54 Waterbury Rd

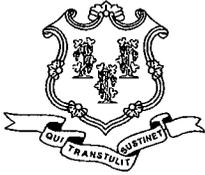
**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Afternoon,

After review of the files, it was found that we do not have any original approvals on the Tower on 54 Waterbury Rd. What we have been informed is to give notice to the Siting Council of the State of Connecticut on this and they will handle from here.

Thank you for time.

Rosalyn Moffo  
Land Use Tech



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: [siting.council@po.state.ct.us](mailto:siting.council@po.state.ct.us)

[www.ct.gov/csc](http://www.ct.gov/csc)

September 1, 2006

Kenneth C. Baldwin, Esq.  
Robinson & Cole LLP  
280 Trumbull Street  
Hartford, CT 06103-3597

RE: **EM-VER-115-060810** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 54 Waterbury Road, Prospect, Connecticut.

Dear Attorney Baldwin:

At a public meeting held on August 31, 2006, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the condition that the modifications specified on drawing ST-1 and sealed by Jeffrey Kirby, P.E. are performed prior to the antenna installation and that a signed letter from a Professional Engineer is submitted to the Council to certify that the modifications have been properly completed.

The proposed modifications are to be implemented as specified here and in your notice dated August 10, 2006, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Colin C. Tait  
Vice Chairman

CCT/laf

- c: The Honorable Robert J. Chatfield, Mayor, Town of Prospect
- William J. Donovan, Zoning Enforcement Officer, Town of Prospect
- Thomas F. Flynn III, Esq., Sprint Nextel Communications
- Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
- Michele G. Briggs, New Cingular Wireless PCS, LLC
- Christopher B. Fisher, Esq., Cuddy & Feder LLP

# **ATTACHMENT 2**



PROSPECT NORTH CT  
54 WATERBURY RD  
PROSPECT, CT 06712

GENERAL NOTES AND SPECIFICATIONS

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING THE 10/CA-222 ROBSON C STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES, 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE, AND LOCAL CODES.
- SHOULD ANY FIELD CONDITIONS PRELUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
- CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
- CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
- CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
- CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION AND ALL TRADES AS APPLICABLE PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
- CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
- LOCATION OF EQUIPMENT AND WORK SUPPLIED BY OTHERS THAT IS DYNAMICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING BUILDING/S/PROPERTY'S OPERATIONS, COORDINATE WORK WITH BUILDING/PROPERTY OWNER.
- DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANTIAL TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
- ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
- ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
- ANY AND ALL ERRORS, DISCREPANCIES, AND "MISSED" ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE VERIZON WIRELESS CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO "EXTRA" WILL BE ALLOWED FOR MISSED ITEMS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
- CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
- COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB- CONTRACTORS FOR ANY CONDITION PER THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
- ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED PRIOR TO ANY EXCAVATION WORK. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.
- ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE GOVERNING BUILDING CODE.
- BEFORE BEGINNING THE WORK, THE CONTRACTOR IS RESPONSIBLE FOR MAKING SUCH INVESTIGATIONS CONCERNING PHYSICAL CONDITIONS (SURFACE AND SUBSURFACE) AT OR CONTIGUOUS TO THE SITE WHICH MAY AFFECT PERFORMANCE AND COST OF THE WORK.
- ALL DIMENSIONS, ELEVATIONS, AND OTHER REFERENCES TO EXISTING STRUCTURES, SURFACE, AND SUBSURFACE CONDITIONS ARE APPROXIMATE. NO GUARANTEE IS MADE FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS, ELEVATIONS, ANGLES WITH EXISTING CONDITIONS AND WITH ARCHITECTURAL AND SITE DRAWINGS BEFORE PROCEEDING WITH ANY WORK.
- AS THE WORK PROGRESSES, THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONDITIONS WHICH ARE IN CONFLICT OR OTHERWISE NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS AND SHALL NOT PROCEED WITH SUCH WORK UNTIL THE CONFLICT IS SATISFACTORILY RESOLVED.

SITE DIRECTIONS

- FROM: 20 ALEXANDER DRIVE 2ND FLOOR  
WALLINGFORD, CONNECTICUT
- TO: 54 WATERBURY RD  
PROSPECT, CT 06712
- START OUT GOING NORTH ON ALEXANDER DR TOWARD BARNES INDUSTRIAL RD. 0.18 MI
  - TURN RIGHT ONTO BARNES INDUSTRIAL RD. 0.11 MI
  - TAKE THE 1ST LEFT ONTO CT-68. 4.35 MI
  - TURN LEFT ONTO S MERIDON RD/CT-70/CT-68. CONTINUE TO FOLLOW CT-70/CT-68. 1.24 MI
  - TURN RIGHT ONTO S MAIN ST/CT-101/CT-68. 0.15 MI
  - TURN LEFT ONTO MAIN ST/CT-70/CT-68. 0.29 MI
  - TURN LEFT ONTO W MAIN ST/CT-70/CT-68. 1.40 MI
  - TURN LEFT ONTO PROSPECT RD/CT-68. CONTINUE TO FOLLOW CT-68. 3.40 MI
  - 54 WATERBURY RD, PROSPECT, CT 06713-1219, 54 WATERBURY RD IS ON THE RIGHT. 0.52 MI

VICINITY MAP



DESIGN BASIS:

GOVERNING CODE: 2015 INTERNATIONAL BUILDING (IBC) AS MODIFIED BY THE 2018 CT STATE BUILDING CODE AND AMENDMENTS.

1. DESIGN CRITERIA:

- RISK CATEGORY: II (BASED ON TABLE 1604.5 OF THE 2015 IBC)
- NOMINAL DESIGN SPEED (TOWER): 97 MPH (Wind) (EXPOSURE B/IMPORTANCE FACTOR 1.0 BASED ON ASCE 7-10) PER 2015 INTERNATIONAL BUILDING CODE (IBC) AS MODIFIED BY THE 2018 CONNECTICUT STATE BUILDING CODE.
- SEISMIC LOAD (DOES NOT CONTROL): PER ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES.

PROJECT SUMMARY

1. THE PROPOSED UPGRADE SCOPE OF WORK AT THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY GENERALLY INCLUDES THE FOLLOWING:

- A. TOWER FOUNDATION REQUIRED MODIFICATION ALONG WITH GUY WIRE TENSION ADJUSTMENTS. THIS DESIGN IS REFERENCED ON SHEET C-1 OF THESE CONSTRUCTION DRAWINGS.
- B. AT THE EXISTING GUYED LATTICE TOWER MOUNTED ANTENNA SECTORS:
- REMOVE (3) EXISTING ANDREW - HBX-85170S-A2M ANTENNAS.
  - REMOVE (3) EXISTING ANTEL - BXA-700S3-80F ANTENNAS.
  - REMOVE (3) EXISTING AMPHENOL - BXA-171063-12CF-EDIN-2 ANTENNAS.
  - REMOVE (1) EXISTING 1-1/4" HYBRIFLEX CABLE.
  - REMOVE (3) EXISTING NOKIA RADIOS.
  - REMOVE (1) EXISTING RAYCAP OVP BOX.
  - RETAIN (1) EXISTING ANDREW - LHX-85140S-VIM ANTENNAS.
  - RETAIN (2) EXISTING SWEDDOM - SWP220514 ANTENNAS.
  - RETAIN (6) EXISTING 1-5/8" COAXIAL CABLES.
  - RETAIN (12) EXISTING 1-5/8" SPARE COAXIAL CABLES.
  - INSTALL (6) COMSCOPE - N91-858-R2B ANTENNAS.
  - INSTALL (3) SAMSUNG - MTR407-77A ALL-IN-ONE ANTENNA/ RRUs.
  - INSTALL (3) SAMSUNG - RF44394-25A RRUs.
  - INSTALL (3) SAMSUNG - RF44404-13A RRUs.
  - INSTALL (3) COMSCOPE - BASMNT-SBS-1-2 ANTENNA MOUNTS.
  - INSTALL (1) 12x24 HYBRIFLEX LI CABLE.
  - INSTALL (1) OVP-12 BOX.
- B. AT THE EXISTING EQUIPMENT SHELTER:
- REMOVE (3) EXISTING NOKIA RADIOS.

PROJECT INFORMATION

SITE NAME: PROSPECT NORTH CT  
SITE ADDRESS: 54 WATERBURY RD  
PROSPECT, CT 06712

LESSEE/TENANT: CELCO PARTNERSHIP  
c/o Verizon Wireless  
20 ALEXANDER DRIVE 2ND FLOOR  
WALLINGFORD, CT 06462

CONTACT PERSON: WALTER CHARCZNSKI (CONSTRUCTION MANAGER)  
VERIZON WIRELESS  
(860) 308-1808

ENGINEER: CENTEK ENGINEERING, INC.  
63-2 NORTH BRAMFORD RD.  
BRAMFORD, CT 06408  
(203) 488-0580

PROJECT COORDINATES: LATITUDE: 41° 30' 39.3408"N  
LONGITUDE: 72° 56' 56.3772"W  
(COORDINATES REFERENCED FROM VERIZON WIRELESS RFD5 DATED 08/18/2021)

SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	0
B-1	RF BILL OF MATERIALS - ALPHA/BETA SECTORS	0
B-2	RF BILL OF MATERIALS - GAMMA SECTOR	0
C-1	SITE PLAN AND ELEVATION	0
C-2	ANTENNA SECTOR CONFIGURATION DETAILS	0
C-3	RF DETAILS	0
E-1	ELECTRICAL DETAILS AND SPECIFICATIONS	0

CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION  
REVISIONS - BASED FOR CLEAR REVIEW  
DATE: 03/21/22  
SCALE: AS NOTED  
JOB NO. 21007.55



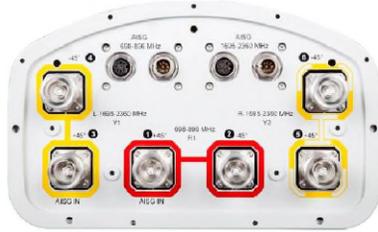
CENTEK Engineering  
www.CentekEng.com  
(203) 488-0580  
(203) 488-8587 Fax  
63-2 North Bramford Road  
Bramford, CT 06408

Celco Partnership d/b/a Verizon Wireless  
PROSPECT NORTH CT  
54 WATERBURY RD  
PROSPECT, CT 06712

TITLE SHEET

T-1  
Sheet No. 1 of 1



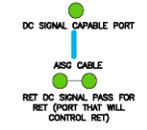


**PLUMBING DIAGRAM NOTES:**

1. PORTS 1 & 2 ARE FOR LOW BAND (898-898 MHz).
2. PORTS 3, 4, 5 & 8 ARE FOR HIGH BAND (1895-2380 MHz).
3. SMART BIAS TEE (SBT) IS THROUGH ANTENNA PORTS 1 & 3 (1 FOR LOW BAND AND 3 FOR HIGH BAND).
4. AISG CABLE IS ONLY NEEDED WHEN DRAWN IN THE DIAGRAMS ABOVE. IF IT IS NOT DRAWN THEN SBT IS ENOUGH TO CONTROL ALL RET MOTORS.
5. NOT ALL SBT PORTS ARE NEEDED TO CONTROL RET. ONLY GREEN PORT CONNECTION TO GREEN PORT WILL CONTROL RET.

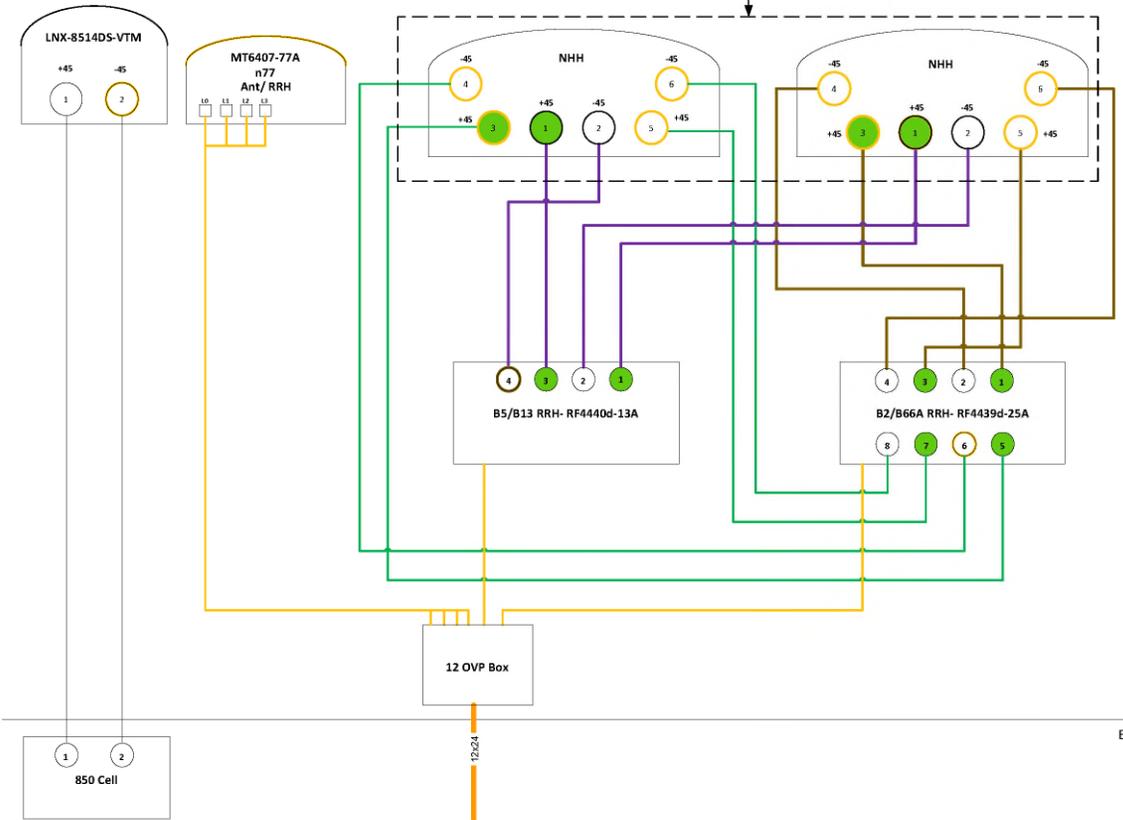
**PLUMBING DIAGRAM COMMENTS:**

- DIAGRAMS SHOW ANTENNA PORT CONFIGURATIONS AS VIEWED FROM BELOW ANTENNAS.
- ANTENNA POSITIONS ARE INDICATED AS VIEWED FROM IN FRONT OF ANTENNAS.
- CAP AND WEATHERPROOF UNUSED ANTENNA PORTS.
- ALL PLUMBING DIAGRAM COLORS ARE IRRELEVANT EXCEPT FOR AISG AND HYBRIDFLEX CABLE. (FOR THE COAX COLORS, FOLLOW COAX COLORS GUIDE ABOVE)



# GAMMA

DUAL ANTENNA MOUNT:  
BSAMNT-SBS-1-2



TOWER  
EQUIPMENT  
SHELTER

DATE:	03/31/22
SCALE:	AS NOTED
JOB NO.:	21007.55
RF BILL OF MATERIALS	
<b>B-2</b>	
Sheet No. 2 of 2	

PROFESSIONAL ENGINEER SEAL

**verizon**

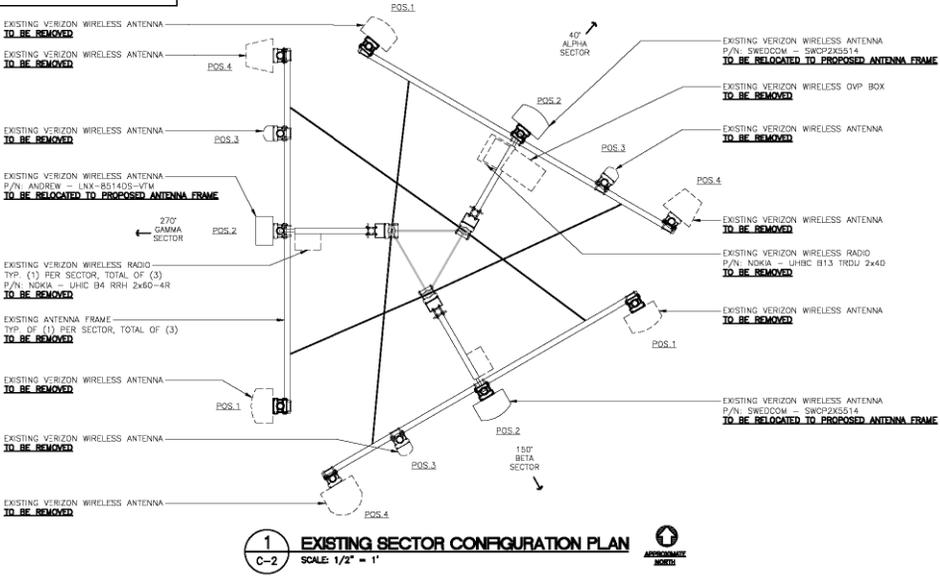
**CENITEK Engineering**  
Centek is a Verizon Partner

(203) 486-0900  
(203) 488-8537 Fax  
65-2 North Branford Road  
Branford, CT 06405  
www.CentekEng.com

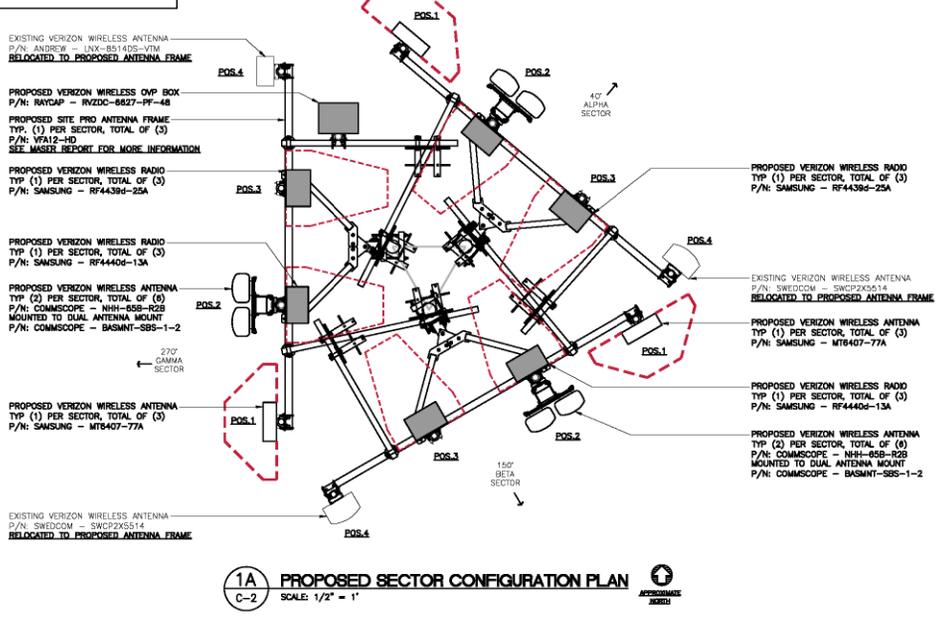
**Cellco Partnership d/b/a Verizon Wireless**  
**PROSPECT NORTH CT**  
54 WATERBURY RD  
PROSPECT, CT 06712



**EXISTING ANTENNA CONFIGURATIONS**



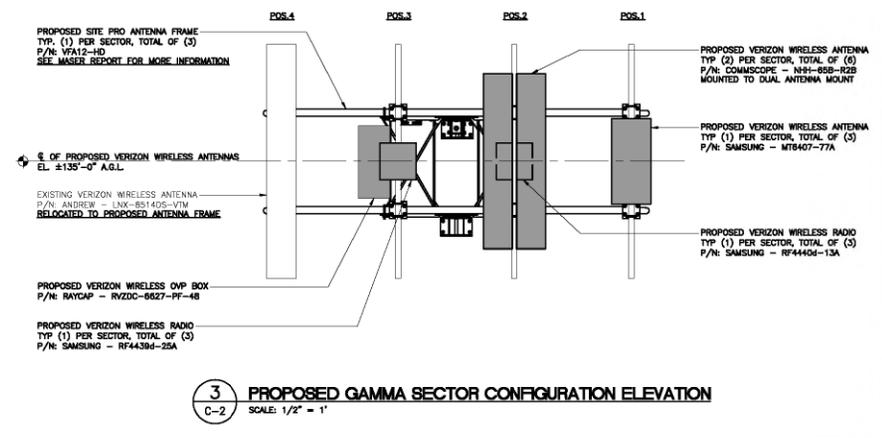
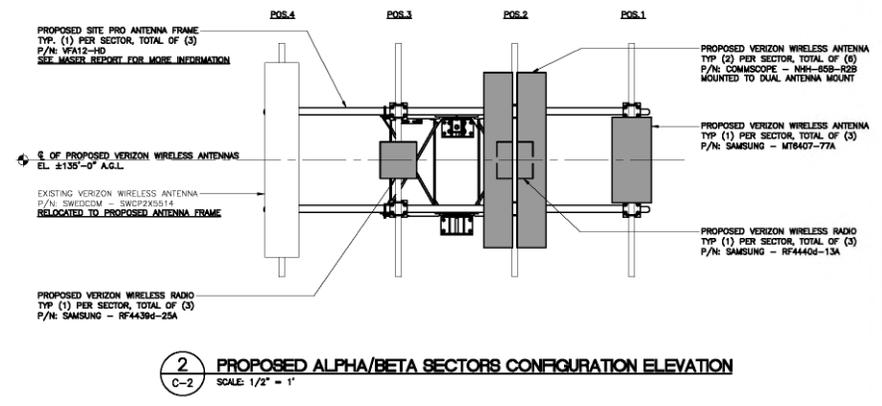
**PROPOSED ANTENNA CONFIGURATIONS**



**LEGEND**

---	VERIZON WIRELESS VZS01 REQUIRED ANTENNA CLEARANCE LIMITS (PER DETAILS ON SHEET C-3)
ANTENNA CLEARANCE STATUS	ALPHA SECTOR: COMPLIANT BETA SECTOR: COMPLIANT GAMMA SECTOR: COMPLIANT
---	VERIZON WIRELESS RRU REQUIRED ANTENNA CLEARANCE LIMITS (PER DETAILS ON SHEET C-3)
RRU CLEARANCE STATUS	ALPHA SECTOR: COMPLIANT BETA SECTOR: COMPLIANT GAMMA SECTOR: COMPLIANT

**ANTENNA MOUNT ANALYSIS REFERENCE NOTE:**  
REFER TO PASSING VERIZON WIRELESS MOUNT ANALYSIS REPORT PREPARED BY MASER CONSULTING CONNECTICUT DATED 11/15/21 FOR ADDITIONAL INFORMATION.



PROFESSIONAL ENGINEER SEAL

DATE: 03/31/22  
SCALE: AS NOTED  
JOB NO. 21007.05

ANTENNA SECTOR CONFIGURATION DETAILS

**C-2**  
Sheet No. 2 of 2

Cellco Partnership d/b/a Verizon Wireless  
**PROSPECT NORTH CT**  
54 WATERBURY RD  
PROSPECT, CT 06752

**CENIEK** engineering  
Center to Innovate™  
(203) 688-0900  
(203) 688-8537 Fax  
65-2 North Branford Road  
Branford, CT 06405  
www.CeniekEng.com

CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION  
PERMITS - ISSUED FOR PERMITS  
AS-BUILT DRAWINGS - ISSUED FOR CLEAR PERMIT



6-PORT SECTOR ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT (WITH MOUNTING KIT)
MAKE: COMSCOPE MODEL: NH1-85B-R2B	72.0"L x 11.9"W x 7.0"D	43.7 LBS.

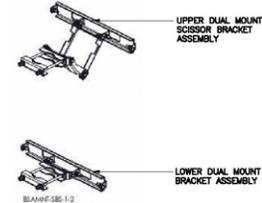
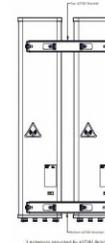
**1 ANTENNA DETAIL**  
NOT TO SCALE



SECTOR ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: MT5407-77A	35.1"H x 16.1"W x 5.5"D (NOT TO EXCEED)	87 LBS. (NOT TO EXCEED)
CLEARANCES AND SERVICE AREA		
TOP: 31.5"	HORIZONTAL DISTANCE: 31.5" (ANT. TO ANT.)	
FRONT, SIDES & BOTTOM: 15.7"	VERTICAL DISTANCE: 63.0" (ANT. TO ANT.)	

NOTES:  
1. THIS ANTENNA HAS ITS OWN BUILT-IN RRH.

**2 SECTOR ANTENNA DETAIL**  
NOT TO SCALE



SIDE-BY-SIDE ANTENNA MOUNTING KIT			
MOUNT	DESCRIPTION	SUPPORTED ANTENNAS	GAP BETWEEN ANTENNAS
MAKE: COMSCOPE MODEL: BASMNT-SBS-1-2	(2) BRACKET KIT FOR MOUNTING (2) ANTENNAS SIDE-BY-SIDE	SRH-RH 85' AND 85' NHH 85' AND 85'	3-3/8"

NOTES:  
1. MOUNT ACCOMMODATES MOST DIAMETERS FROM 2.375" TO 4.5" (O.D.).  
2. CONTRACTOR TO CONFIRM MOUNT MAKE/MODEL AND QUANTITY WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.

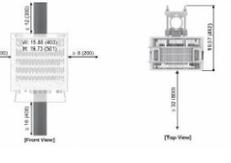
**3 PROPOSED SIDE-BY-SIDE ANTENNA MOUNT**  
NOT TO SCALE



OVP BOX		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: RAYCAP MODEL: DB-C1-12C-24AB-OZ	29.5"H x 16.5"W x 12.6"D	32 LBS.

NOTES:  
1. CONTRACTOR TO CONFIRM OVP BOX MAKE/MODEL AND QUANTITY WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.

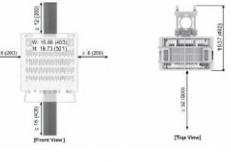
**4 PROPOSED OVER-VOLTAGE PROTECTION BOX**  
NOT TO SCALE



DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: RF4436J-25A	B25: PCS (1900 MHz) B66: AWS (2100 MHz)	15.0"H x 15.0"W x 10.0"D	74.7 LBS.

NOTES:  
1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.

**5 DUAL-BAND AWS/PCS MACRO RADIO UNIT DETAIL**  
NOT TO SCALE



DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: RF440J-13A	B5: 850 MHz B13: 700 MHz	15.0"H x 15.0"W x 9.0"D	70.3 LBS.

NOTES:  
1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.

**6 DUAL-BAND 700/850 MHZ MACRO RADIO UNIT DETAIL**  
NOT TO SCALE

PROFESSIONAL ENGINEER SEAL

DANIEL J. DELUCA  
 LICENSE NO. 10000  
 STATE OF CONNECTICUT  
 PROFESSIONAL ENGINEER

VERIZON  
 Engineering

203) 468-0900  
 203) 468-8637 Fax  
 65-2 North Broad Road  
 Prospect, CT 06709  
 www.CentekEng.com

**Verizon Wireless**  
**PROSPECT NORTH CT**  
 54 WATERBURY RD  
 PROSPECT, CT 06712

DATE: 03/31/22  
 SCALE: AS NOTED  
 JOB NO. 21007.55

RF DETAILS

**C-3**  
 Sheet No. 3 of 3

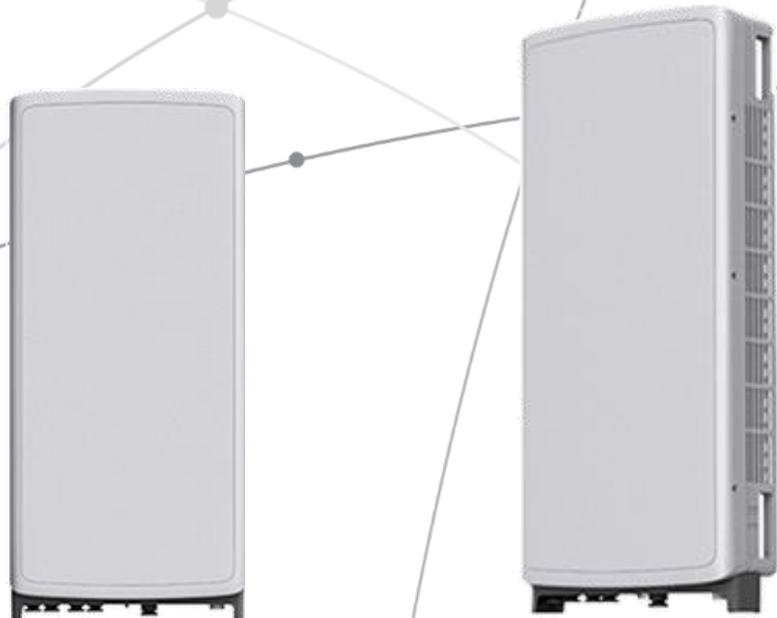


## **SAMSUNG** C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

Samsung C-Band 64T64R Massive MIMO Radio enables mobile operators to increase coverage range, boost data speeds and ultimately offer enriched 5G experiences to users in the U.S..

Model Code : MT6407-77A



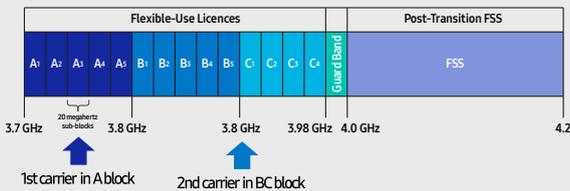
## Points of Differentiation

### Wide Bandwidth

With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

Samsung C-Band massive MIMO Radio covers the entire C-Band 280 MHz spectrum, so it can meet the operator's needs in current A block and future B/C blocks

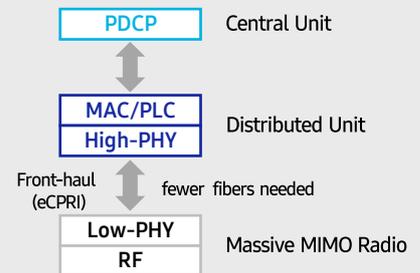
C-Band spectrum supported by Massive MIMO Radio



### Future Proof Product

Samsung C-Band 64T64R Massive MIMO radio supports not only CPRI but also eCPRI as front-haul interface.

It enables operators can cut down on OPEX/CAPEX by reducing front-haul bandwidth through low layer split and using ethernet based higher efficient line.



### Enhanced Performance

C-Band massive MIMO Radio creates sharp beams and extends networks' coverage on the critical mid-band spectrum using a large number of antenna elements and high output power to boost data speeds.

This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

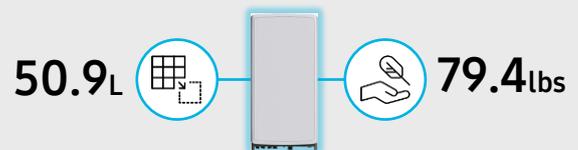
Furthermore, as C-Band massive MIMO Radio supports MU-MIMO (Multi-user MIMO), it enables to increase user throughput by minimizing interference.



### Well Matched Design

Samsung C-Band Massive MIMO radio utilizes 64 antennas, supports up to 280MHz bandwidth, and delivers a 200W output power. Despite the above advanced performance, the Radio has a compact size of 50.9L and 79.4lbs. This makes it easy to install the Radio.

It is designed to look solid and compact, with a low profile appearance so that, when installed, harmonizes well with the surrounding environment.

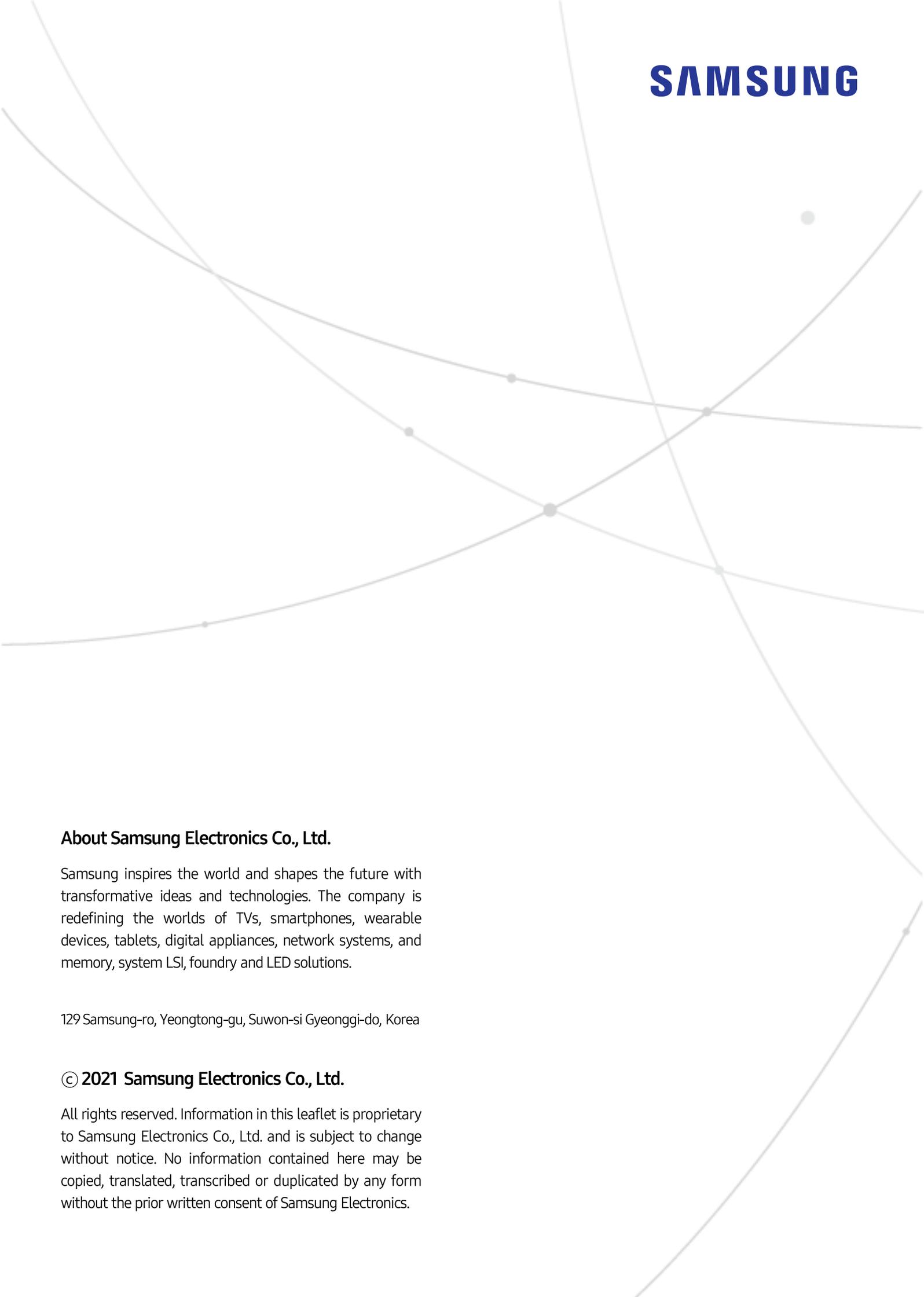


## Technical Specifications

Item	Specification
Tech	NR
Band	n77
Frequency Band	3700 - 3980 MHz
EIRP	78.5dBm (53.0 dBm+25.5 dBi)
IBW/OBW	280 MHz / 200 MHz
Installation	Pole/Wall
Size/Weight	16.06 x 35.06 x 5.51 inch (50.86L) / 79.4 lbs



# SAMSUNG



## **About Samsung Electronics Co., Ltd.**

Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.

129 Samsung-ro, Yeongtong-gu, Suwon-si Gyeonggi-do, Korea

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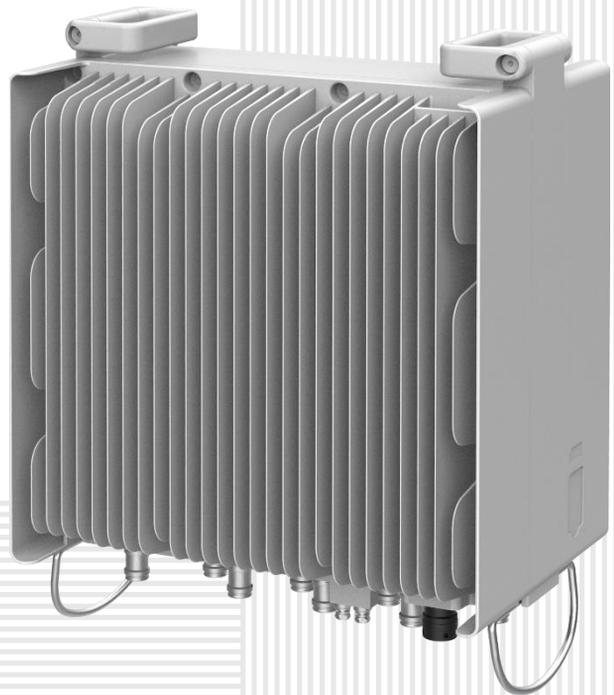
# SAMSUNG

## AWS/PCS MACRO RADIO

DUAL-BAND AND HIGH POWER  
FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This AWS/PCS 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

Model Code RF4439d-25A



Homepage  
[samsungnetworks.com](http://samsungnetworks.com)

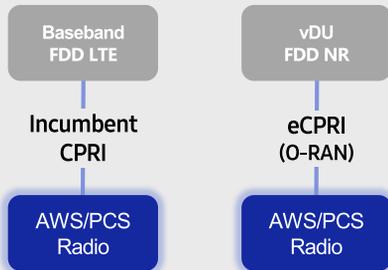


Youtube  
[www.youtube.com/samsung5g](http://www.youtube.com/samsung5g)

## Points of Differentiation

### Continuous Migration

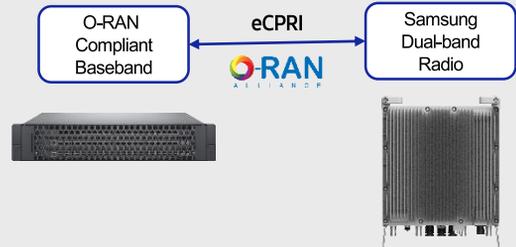
Samsung's AWS/PCS macro radio can support each incumbent CPRI interface as well as advanced eCPRI interfaces. This feature provides installable options for both legacy LTE networks and added NR networks.



### O-RAN Compliant

A standardized O-RAN radio can help in implementing cost-effective networks, which are capable of sending more data without compromising additional investments.

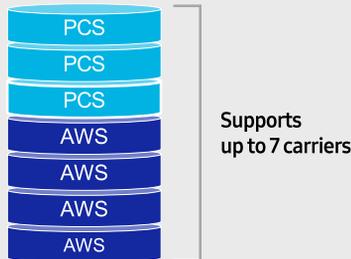
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



### Optimum Spectrum Utilization

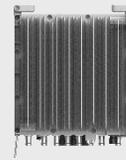
The number of required carriers varies according to site (region). Supporting many carriers is essential for using all frequencies that the operator has available.

The new AWS/PCS dual-band radio can support up to 3 carriers in the PCS (1.9GHz) band and 4 carriers in the AWS (2.1GHz) band, respectively.



### Brand New Features in a Compact Size

Samsung's AWS/PCS macro radio offers several features, such as dual connectivity for baseband for both CDU and vDU, O-RAN capability, more carriers and an enlarged PCS spectrum, combined into an incumbent radio volume of 36.8L.



- 2 FH connectivity
- O-RAN capability
- More carriers and spectrum

Same as an incumbent radio volume

## Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B25(PCS), B66(AWS)
Frequency Band	DL: 1930 – 1995MHz, UL: 1850 – 1915MHz DL: 2110 – 2200MHz, UL: 1710 – 1780MHz
RF Power	(B25) 4 × 40W or 2 × 60W (B66) 4 × 60W or 2 × 80W
IBW/OBW	(B25) 65MHz / 30MHz (B66) DL 90MHz, UL 70MHz / 60MHz
Installation	Pole, Wall
Size/Weight	14.96 x 14.96 x 10.04inch (36.8L) / 74.7lb

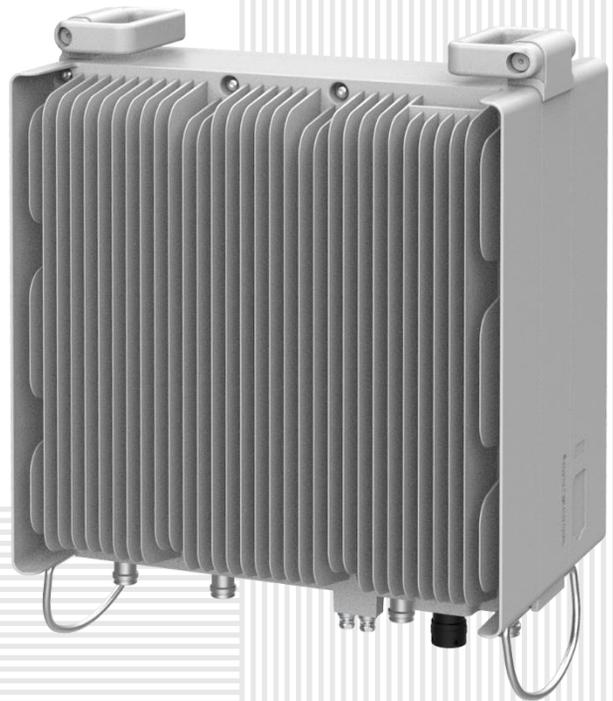
# SAMSUNG

## 700/850MHZ MACRO RADIO

DUAL-BAND AND HIGH POWER  
FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This 700/850MHz 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

Model Code RF4440d-13A



Homepage  
[samsungnetworks.com](http://samsungnetworks.com)

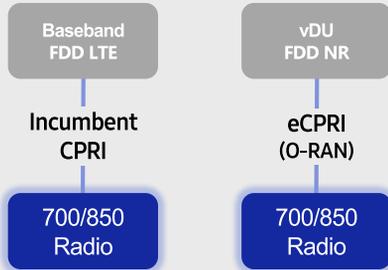


Youtube  
[www.youtube.com/samsung5g](http://www.youtube.com/samsung5g)

## Points of Differentiation

### Continuous Migration

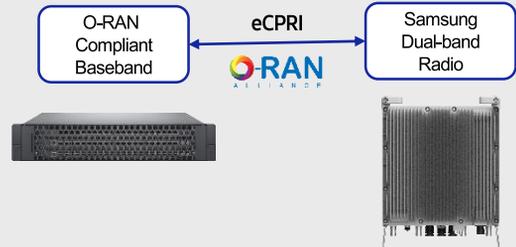
Samsung's 700/850MHz macro radio can support each incumbent CPRI interface as well as an advanced eCPRI interface. This feature provides installable options for both legacy LTE networks and added NR networks.



### O-RAN Compliant

A standardized O-RAN radio can help when implementing cost-effective networks because it is capable of sending more data without compromising additional investments.

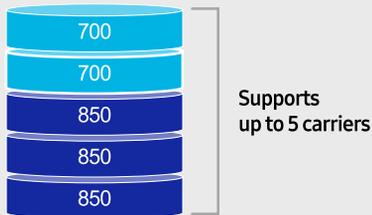
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



### Optimum Spectrum Utilization

The number of required carriers varies according to site (region). The ability to support many carriers is essential for using all frequencies that the operator has available.

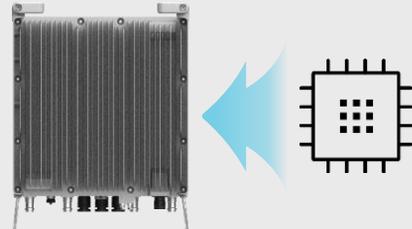
The new 700/850MHz dual-band radio can support up to 2 carriers in the B13 (700MHz) band and 3 carriers in the B5 (850MHz) band, respectively.



### Secured Integrity

Access to sensitive data is allowed only to authorized software.

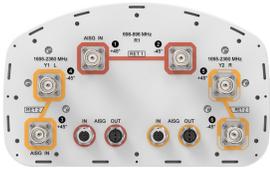
The Samsung radio's CPU can protect root of trust, which is credential information to verify SW integrity, and secure storage provides access control to sensitive data by using dedicated hardware (TPM).



## Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B13(700MHz), B5(850MHz)
Frequency Band	DL: 746 – 756MHz, UL: 777 – 787MHz DL: 869 – 894MHz, UL: 824 – 849MHz
RF Power	(B13) 4 × 40W or 2 × 60W (B5) 4 × 40W or 2 × 60W
IBW/OBW	(B13) 10MHz / 10MHz (B5) 25MHz / 25MHz
Installation	Pole, Wall
Size/Weight	14.96 x 14.96 x 9.05inch (33.2L) / 70.33 lb

# NHH-65B-R2B



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 65° HPBW, 2x RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- One RET for low band and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light gray
<b>Grounding Type</b>	RF connector body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	4
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	6

## Remote Electrical Tilt (RET) Information

<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal Bias Tee</b>	Port 1   Port 3
<b>Internal RET</b>	High band (1)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	13 W

# NHH-65B-R2B

**Protocol** 3GPP/AISG 2.0 (Single RET)

## Dimensions

**Width** 301 mm | 11.85 in

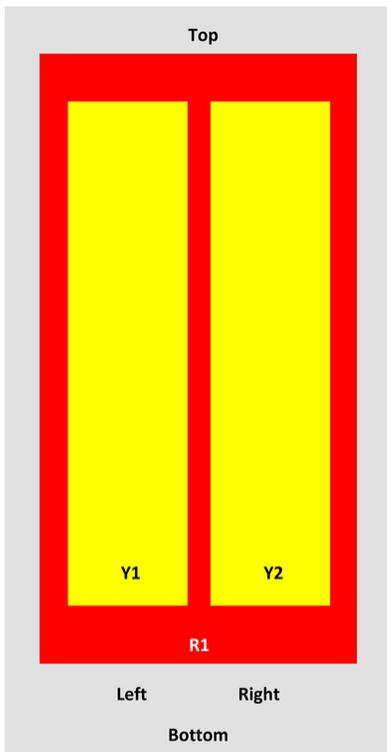
**Depth** 180 mm | 7.087 in

**Length** 1828 mm | 71.969 in

**Net Weight, without mounting kit** 19.8 kg | 43.651 lb

## Array Layout

NHH



Array	Freq (MHz)	Coms	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANXXXXXXXXXXXXX1
Y1	1695-2360	3-4	2	ANXXXXXXXXXXXXX2
Y2	1695-2360	5-6		

View from the front of the antenna

(Sizes of colored boxes are not true depictions of array sizes)

## Electrical Specifications

**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2360 MHz | 698 – 896 MHz

# NHH-65B-R2B

<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>806–896</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2360</b>
<b>Gain, dBi</b>	14.9	15	17.7	17.9	18.4	18.7
<b>Beamwidth, Horizontal, degrees</b>	65	60	71	69	64	57
<b>Beamwidth, Vertical, degrees</b>	12.4	11.2	5.7	5.2	4.9	4.6
<b>Beam Tilt, degrees</b>	0–14	0–14	0–7	0–7	0–7	0–7
<b>USLS (First Lobe), dB</b>	13	14	18	18	19	18
<b>Front-to-Back Ratio at 180°, dB</b>	30	29	31	30	29	31
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	30	30	30	30	30	30
<b>VSWR   Return loss, dB</b>	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	300	300	300

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>806–896</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2360</b>
<b>Gain by all Beam Tilts, average, dBi</b>	14.5	14.5	17.3	17.7	18.1	18.5
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.6	±1.1	±0.4	±0.4	±0.5	±0.3
<b>Gain by Beam Tilt, average, dBi</b>	0°   14.4 7°   14.6 14°   14.3	0°   14.7 7°   14.7 14°   14.1	0°   17.2 4°   17.3 7°   17.3	0°   17.6 4°   17.7 7°   17.7	0°   18.0 4°   18.2 7°   18.1	0°   18.3 4°   18.5 7°   18.6
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±2	±2.1	±3	±4.1	±6.5	±2.9
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.7	±0.7	±0.3	±0.2	±0.3	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>	13	14	16	16	17	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	23	22	27	27	25	25
<b>CPR at Boresight, dB</b>	22	21	23	23	22	19

# NHH-65B-R2B

<b>CPR at Sector, dB</b>	10	7	16	13	11	4
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## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.26 m <sup>2</sup>   2.799 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.22 m <sup>2</sup>   2.368 ft <sup>2</sup>
<b>Wind Loading @ Velocity, frontal</b>	278.0 N @ 150 km/h (62.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	230.0 N @ 150 km/h (51.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	537.0 N @ 150 km/h (120.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	282.0 N @ 150 km/h (63.4 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h   149.75 mph

## Packaging and Weights

<b>Width, packed</b>	409 mm   16.102 in
<b>Depth, packed</b>	299 mm   11.772 in
<b>Length, packed</b>	1952 mm   76.85 in
<b>Weight, gross</b>	32.3 kg   71.209 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant



## Included Products

BSAMNT-3	-	Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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# **ATTACHMENT 3**

	General	Power	Density					
<b>Site Name: Plymouth N</b>								
<b>Tower Height: Verizon @ 135ft</b>								
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total
*F&S Oil				451	0.0031	0.3007	0.10%	
*New Haven Transit				451	0.0031	0.3007	0.10%	
*US Post Office				415	0.0031	0.2767	0.11%	
*Central Comm.				452	0.0031	0.3013	0.10%	
*CT Motor Club				150.92	0.0381	0.2	1.91%	
*Sprint	1	350	146	865	0.0064	0.5767	0.11%	
*Sprint	5	622	146	1900	0.0571	1	0.57%	
*Sprint	1	875	146	865	0.0161	0.5767	0.28%	
*Sprint	1	3112	146	1900	0.0571	1	0.57%	
*Sprint	2	1556	146	2500	0.0571	1	0.57%	
*Clearwire	2	153	146	2496	0.0056	1	0.06%	
*Clearwire	1	211	151	23 GHz	0.0036	1	0.04%	
*AT&T-UMTS	2	836	126	850	0.0418	0.5667	0.74%	
*AT&T-PCS-UMTS	2	1154	126	1900	0.0576	1	0.58%	
*AT&T-LTE	2	1239	126	700	0.0619	0.4667	1.33%	
*AT&T-PCS-LTE	2	1876	126	1900	0.0937	1	0.94%	
*AT&T-GSM	2	836	126	850	0.0418	0.5667	0.74%	
<b>VZW 700</b>	<b>4</b>	<b>689</b>	<b>135</b>	<b>0.0054</b>	<b>751</b>	<b>0.5007</b>	<b>1.09%</b>	
<b>VZW CDMA</b>	<b>2</b>	<b>476</b>	<b>135</b>	<b>0.0019</b>	<b>877.26</b>	<b>0.5848</b>	<b>0.32%</b>	
<b>VZW Cellular</b>	<b>4</b>	<b>700</b>	<b>135</b>	<b>0.0055</b>	<b>874</b>	<b>0.5827</b>	<b>0.95%</b>	
<b>VZW PCS</b>	<b>4</b>	<b>2992</b>	<b>135</b>	<b>0.0236</b>	<b>1975</b>	<b>1.0000</b>	<b>2.36%</b>	
<b>VZW AWS</b>	<b>4</b>	<b>1671</b>	<b>135</b>	<b>0.0132</b>	<b>2120</b>	<b>1.0000</b>	<b>1.32%</b>	
<b>VZW CBAND</b>	<b>2</b>	<b>13335</b>	<b>135</b>	<b>0.0526</b>	<b>3730.08</b>	<b>1.0000</b>	<b>5.26%</b>	
								<b>20.15%</b>
* Source: Siting Council								

# **ATTACHMENT 4**

## Reinforcement Design of a 160 ft Guyed Tower

**Site Number/PSLC: 468765**

**Site Name: Prospect North CT**

**County: New Haven**

**Location: Waterbury Rd, Prospect, CT**

Checked By:



Patrick Botimer

Structural Design Engineer V



Kenneth Tang

Digitally signed by  
Kenneth Tang  
Date: 2022.05.26  
10:36:03 -07'00'

## Centek Engineering

63-2 North Branford Rd,

Branford, CT 06405

**May 2022**



May 23, 2022

Doug Drost  
Centek Engineering  
63-2 North Branford Rd  
Branford, CT 06405

RE: Verizon Wireless – 468765 – Prospect North CT  
54 Waterbury Rd, Prospect, CT

Doug:

We have completed the modification design of the subject tower. The tower was analyzed according to the code wind and ice parameters outlined in the *Code Requirements Table* following this letter.

The subject tower is a 160' guyed tower consisting of all-welded sections with pipe legs and pipe bracing. The tower has been previously reinforced. Tower face dimension is 30" the full height above an 80" tapered base. The tower mast is laterally supported by three levels of guying attached to one set of three guy anchors. Foundation capacities were based on a foundation investigation completed by our office and site-observed soil characteristics.

The loading used in the analysis consisted of the existing antennas/lines as well as the following for Verizon Wireless at 135' on existing antenna frames:

- (6) Commscope NHH-65B-R2B antennas [2 per sector]
- (2) Swedcom SWCP 2X5514 antennas [1ea for Alpha & Gamma]
- (1) Andrew LNX-8514DS-VTM antenna [Beta]
- (3) Samsung MT6407-77A antennas [1 per sector]
- (3 ea) Samsung RF4439d-25A and RF4440d-13A units [1 ea. per sector]
- (1) RVZDC-6627-PF-48 OVP-12
- (18) 1-5/8" coax cables and (1) 12x24 hybriflex cables

The proposed feed line is located as shown on drawing E-7.

The scope of reinforcement, as shown in drawing 22012, includes the following:

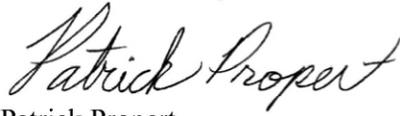
- Expand the foundation pad from an existing square 3'-4" pad to 8'x3'4" pad
- Change guy cable tension in guy levels 2 and 3

With the reinforcements properly install, the tower and foundation will have adequate capacity to support the proposed loading with a maximum stress rating of 99.5%. We recommend a post-construction inspection be completed by a structural engineer to document that tower-mounted equipment has been placed in compliance with the requirements of this analysis. For a detailed listing of the tower's post-reinforcement performance, please see pages 11 and 13 of the calculations.

We appreciate the opportunity to provide our professional services to Centek Engineering and Verizon Wireless, and if you have any questions concerning this analysis, please contact us.

Sincerely,

ARMOR TOWER, INC.



Patrick Propert  
Structural Design Engineer III



Kenneth Tang

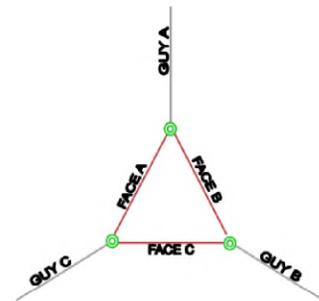
Digitally signed by  
Kenneth Tang  
Date: 2022.05.26  
10:36:20 -07'00'

## CODE REQUIREMENTS

<b>Governing code:</b>	2015 CT State Building Code
<b>Code basis/adoption:</b>	2015 International Building Code
<b>Referenced standard:</b>	ANSI/TIA 222-G-2
<b>Basic wind speed: (3-sec. gust):</b>	Per IBC 2015 1609.3.1 and ASCE 7-10 $V_{asd}$ 97 mph with no ice 50 mph with 3/4" concurrent ice
<b>County of site location:</b>	<b>New Haven</b>
<b>ASCE 7 Special wind region:</b>	No
<b>Structure/Risk Category:</b>	II
<b>Exposure Category:</b>	C
<b>Topographic Category: (Method 1)</b>	1 - no topographic escalation
<b>Crest Height:</b>	0 ft

## PRIMARY ASSUMPTIONS CONSIDERED IN THIS PROJECT

1. Leg A is assumed to be oriented North.
2. Allowable steel stresses are defined by AISC-LRFD-99/360-16 and all welds conform to AWS D1.1 specification.
3. If reserved antennas/feed lines by other carriers or the tower owner are to be considered in this analysis, it is the responsibility of Centek Engineering and its affiliates to provide this information.
4. Any deviation from the analyzed antenna loading will require a re-analysis of the tower for verification of structural integrity. This analysis has considered the proposed feed lines to be located as shown on drawing E-7.
5. This analysis assumes all tower members are galvanized adequately to prevent corrosion of the steel and that all tower members are in "like new" condition with no physical deterioration. This analysis also assumes the tower has been maintained properly per TIA 222-H Annex J recommended inspection and maintenance procedures for tower owners and is in a plumb condition. Armor Tower has not completed a condition assessment of the tower.
6. No accounting for residual stresses due to incorrect tower erection can be made. This analysis assumes all bolts are appropriately tightened providing necessary connection continuity and that the installation of the tower was performed by a qualified tower erector.
7. Foundation capacities are based on a foundation investigation completed by this office in March 2022 and site-observed soil characteristics. If more accurate data for soil properties is required, Armor Tower can assist the client in obtaining the appropriate boring logs and subsurface investigation.
8. No conclusions, expressed or implied, shall indicate that Armor Tower has made an evaluation of the original design, materials, fabrication, or potential installation or erection deficiencies. Any information contrary to that assumed for the purpose of preparing this analysis could alter the findings and conclusions stated herein.
9. Tower member sizes and geometry are based on a tower reinforcement design completed by Bay State Design in January 2011 and a structural analysis completed by Trylon in October 2016. Existing antenna loading is based in part on the Trylon structural analysis, as well as emails with



Centek Engineering. It is our assumption that this data is complete and accurately reflects the existing conditions of the tower and equipment. Armor Tower has not been commissioned to field-validate this data. Armor Tower reserves the right to add to or modify this report as more information becomes available. Proposed equipment was outlined in an RF design (Rev. 1) dated August 2021.

10. The investigation of the load carrying capacities of the antenna supporting frames/mounts is outside the scope of this analysis. Antenna mount certification can be completed under a separate contract.

PREPARED FOR:

**Centek Engineering, Inc.**  
63 North Branford Rd,  
Branford, CT 06405



**ARMOR  
TOWER  
ENGINEERING**

9 NORTH MAIN ST, FLOOR 2  
CORTLAND, NY 13045  
PHONE: 807-591-5381  
FAX: 866-670-0940

NO	DATE	DESCRIPTION	DWG / KT	CHK
1	18MAY22	INITIAL RELEASE	PEP	KT

SITE INFO

VZW PROSPECT NORTH  
WATERBURY RD  
PROSPECT, CT

SHEET SCALE / UNITS

**NTS**  
ALL DIMENSIONS IN INCHES  
UNLESS NOTED OTHERWISE

SHEET TITLE

**REINFORCEMENT**

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SHEET # **S-1**  
FILENAME **22012**

- CONTRACTOR NOTES:
1. THE CONTRACTOR COMPLETING THIS WORK SHALL HAVE PRIOR EXPERIENCE WITH THIS LEVEL OF CONSTRUCTION COMPLEXITY.
  2. CONTRACTOR SHALL BUDGET A SITE VISIT TO CHECK CRITICAL DIMENSIONS PRIOR TO MATERIAL ORDERING AND FABRICATION. VIF-VERIFY IN FIELD.
  3. CONTRACTOR SHALL VERIFY THAT NO OBSTRUCTIONS (IE: STEP BOLTS, HAND HOLES, CABLE PORTS, SAFETY CLIMB CABLE ATTACHMENT) WILL HINDER THE PLACEMENT AND LOCATION OF REINFORCING ELEMENTS. ALL OBSTRUCTIONS AND DISCREPANCIES SHALL BE REPORTED TO ARMOR TOWER PRIOR TO CONSTRUCTION.
  4. COMMENCEMENT OF STRUCTURAL STEEL WORK WITHOUT NOTIFYING ENGINEER (ARMOR TOWER) OF ANY DISCREPANCIES WILL BE CONSIDERED ACCEPTANCE OF PRECEDING WORK.
  5. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS & METHODS AS WELL AS PROTECTING EXISTING LINES AND FACILITIES FROM WELDING AND CONSTRUCTION DAMAGE.
  6. STABILITY OF THE TOWER DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. TEMPORARY GUYING SHALL BE USED TO MAINTAIN MAST STABILITY DURING RE-GUYING. ARMOR TOWER CAN ASSIST THE CONTRACTOR WITH CLASS IV RIGGING PLANS AS NEEDED.
  7. REINFORCEMENT SEQUENCE SHALL COMMENCE FROM GROUND LEVEL UP.

**GUY CABLE NOTES:**

1. PREFORMED LINE PRODUCTS BIG GRIP DEAD ENDS (PREFORMS) MAY NOT BE UNWOUND AND REUSED. NEW PREFORMS MUST BE USED.
2. TABULATED CABLE LENGTHS ARE MINIMUM LENGTHS FOR ONE CABLE. WE RECOMMEND THE CONTRACTOR ORDER EXTRA.
3. AFTER REPLACEMENT OF GUY WIRES AND/OR COMPONENTS, THE ENTIRE TOWER SHALL PLUMBED AND THE GUYS RE-TENSIONED TO THE VALUES INDICATED IN THE TABLE.
4. NOTE THAT THE TENSION IN GUY LEVELS 2 AND 3 ARE TO BE MODIFIED FROM TYPICAL 10% TENSION. STAINLESS STEEL TAG(S) SHALL BE STAMPED AS NOTED:

"GUY LEVEL: X"

"TENSION: xxx# (x%)"

THE TAGS SHALL BE ATTACHED TO THE TURNBUCKLES WITH STAINLESS STEEL OR GALVANIZED WIRE TO PREVENT ADJUSTMENT TO TYPICAL VALUES AFTER A FUTURE ROUTINE TENSION CHECK.

**FABRICATION AND ASSEMBLY NOTES:**

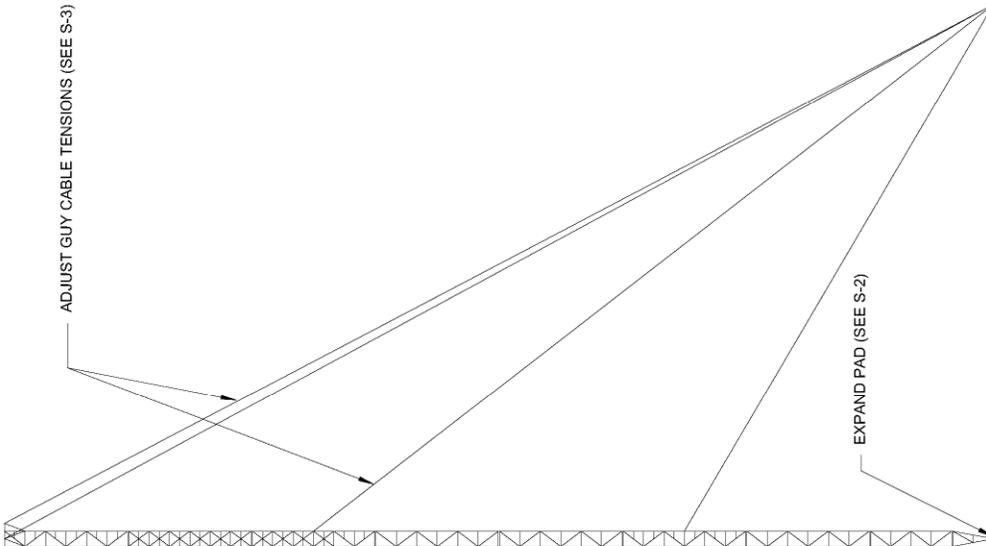
1. ANY INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS REQUIRING REMEDIAL OR CORRECTIVE ACTION SHALL REQUIRE ENGINEER'S REVIEW.
2. NO UNAUTHORIZED COPIES (NOT SHOWN IN DRAWINGS) ARE PERMITTED. CONTACT ARMOR TOWER FOR GUIDANCE.
3. NO TOWER MEMBERS OR ASSEMBLY BOLTS SHALL BE LEFT OFF THE TOWER OVER NIGHT.
4. ALL REINFORCEMENTS SHALL BE IN PLACE PRIOR TO ANTENNA INSTALLATION.
5. ALL HOLLOW PARTS SHALL HAVE GALVANIZING DRAIN HOLES PROVIDED.
6. BRACING REPLACEMENT SHALL NOT BE DONE WHEN ANTICIPATED AMBIENT WIND SPEEDS EXCEED 15 MPH.
7. ANY REQUIRED BRACE REPLACEMENT SHALL BE DONE ONE-AT-A-TIME.

**POST-MODIFICATION INSPECTION:**

1. FINAL INSPECTION OF THESE MODIFICATIONS SHALL BE COMPLETED BY AN ENGINEER.
2. REQUIRED DOCUMENTATION FROM CONTRACTOR:  
\*MATERIAL ORDERS AND MILL CERTIFICATIONS  
\*CONCRETE BATCH TICKETS  
\*CERTIFIED WELDING INSPECTIONS  
\*PHOTOGRAPHIC DOCUMENTATION OF WORK AND COMPLIANCE.

**MATERIAL NOTES:**

1. ALL PARTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION TO ASTM A123 SPECIFICATIONS.
2. ALL STEEL SHALL BE PAINTED TO MATCH EXISTING COLOR/BANDING AFTER INSTALLATION.



PREPARED FOR:  
**Centek Engineering, Inc.**  
 63 North Branford Rd,  
 Branford, CT 06405



**ARMOR TOWER ENGINEERING**

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 CORTLAND, NY 13045  
 PHONE: 867-591-5381  
 FAX: 866-671-0940

SITE INFO	
NO.	DATE
1	18MAY22
	INITIAL RELEASE
	DESCRIPTION
	DWG. NO.
	CHK.

VZW PROSPECT NORTH  
 WATERBURY RD  
 PROSPECT, CT

SHEET SCALE / UNITS  
**NTS** ALL DIMENSIONS IN INCHES  
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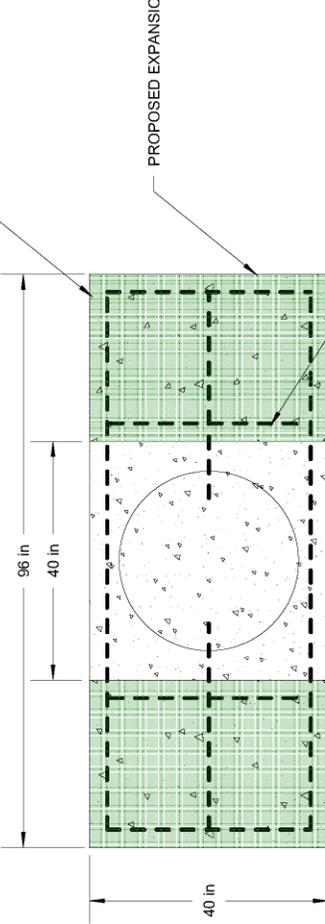
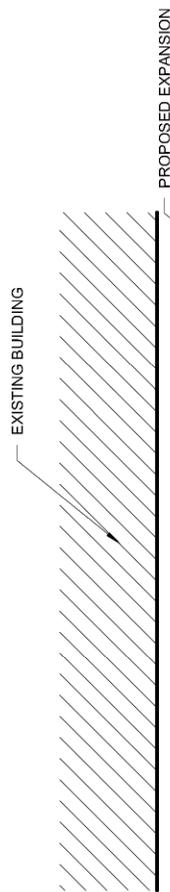
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**REINFORCEMENT**

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SHEET # **S-2** FILENAME **22012**

- CONCRETE SPECIFICATIONS**
- MIX: 4000 PSI AT 28 DAYS
  - SLUMP: 3-4 INCHES
  - CONTRACTOR SHALL ENSURE THAT A 3RD PARTY INSPECTION COMPANY WILL BE CONFIRMING MIX COMPLIANCE WITH TEST CYLINDERS.
  - CONCRETE INSTALLATION SHALL MEET ACI 318-05 INSTALLATION REQUIREMENTS FOR REINFORCED CONCRETE.
  - ALL CONCRETE SHALL BE PLACED AGAINST UNDISTURBED SOIL FREE OF FREE STANDING WATER AND ALL FOREIGN OBJECTS AND MATERIALS.
  - MINIMUM CONCRETE COVER SHALL BE 3" OVER ALL REINFORCING BARS.
  - REINFORCING BARS SHALL BE ASTM A-615 GRADE 60 DEFORMED BARS.
  - ASSEMBLE BARS WITH TIE WIRES ONLY. WELDING OF BARS IS NOT PERMITTED.
  - EXISTING CONCRETE THAT IS TO BE BONDED TO NEW CONCRETE SHALL BE CLEANED OF ALL LOOSE CONCRETE AND SOIL. APPLY A CONCRETE BONDING AGENT (SIKADURE 32 HI-MOD EPOXY) TO THE EXISTING PIER SURFACE PRIOR TO THE NEW CONCRETE POUR. FOLLOW BONDING AGENT MANUFACTURER'S RECOMMENDATIONS.
  - DOWEL EPOXY SHALL BE RED HEAD EPOX C6+ FAST CURING EPOXY AND SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION DIRECTIONS.
  - DOWEL HOLES SHALL BE 7/8" DIA x 9-3/4" DEEP AND CLEANED PER EPOXY MANUFACTURER'S INSTRUCTIONS PRIOR TO EPOXY AND BAR PLACEMENT.
- CONCRETE VOLUME: 2.0 CU YD.

- SOIL SPECIFICATIONS:**
- BACKFILL SHALL BE OF EXCAVATED MATERIAL AND SHALL BE COMPACTED TO 120 PCF IN 6" LIFTS.
  - BACKFILL SHALL BE MOUNDING ABOVE ANCHOR BLOCKS TO PREVENT PONDING.

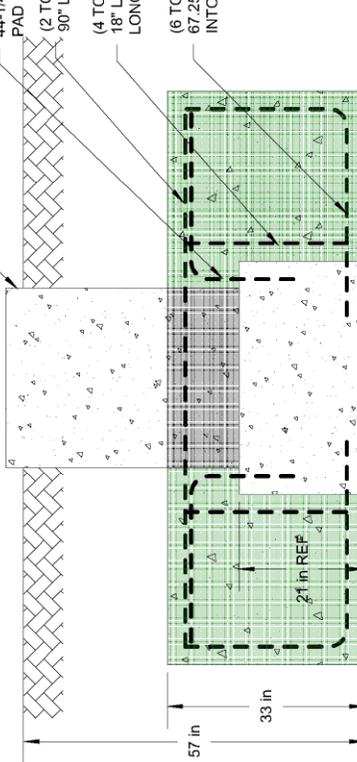


**PLAN**

(8) TOTAL PROPOSED #6 SHORT BARS  
 33" LONG, TO BE PLACED IN TWO LAYERS  
 3" FROM PAD OR EDGE.

EXISTING PAD  
 EXISTING 30" DIA PIER

- (4) TOTAL PROPOSED #6 VERTICAL DOWELS  
 44-1/4" LONG, TO BE BENT 17"x28.5". TO BE EMBEDDED 9" INTO TOP OF PAD
- (2) TOTAL PROPOSED #6 LONG BARS  
 90" LONG, TO BE PLACE OVER EXISTING PAD
- (4) TOTAL PROPOSED #4 VERTICAL BARS  
 18" LONG, TO BE PLACE AT SHORT AND LONG/DOWEL INTERSECTIONS
- (6) TOTAL PROPOSED #6 DOWEL REBAR  
 67.25" IN LENGTH, TO BE EMBEDDED 9" INTO EXISTING PAD



**ELEVATION**

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SITE INFO  
**VZW PROSPECT NORTH**  
**WATERBURY RD**  
**PROSPECT, CT**

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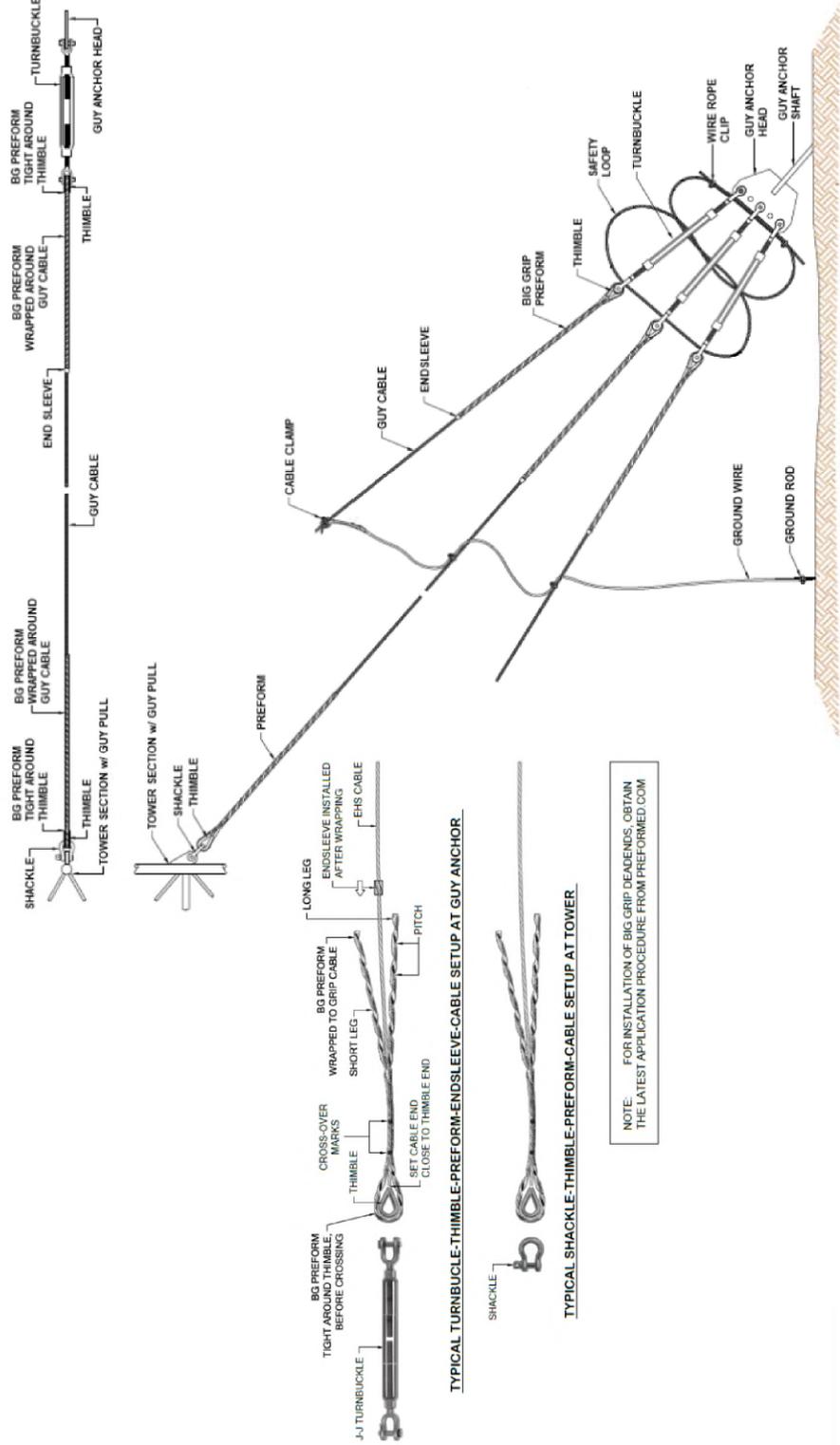
SHEET TITLE  
**GUY TENSIONS**

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SHEET # **S-3**  
 FILENAME **22012**

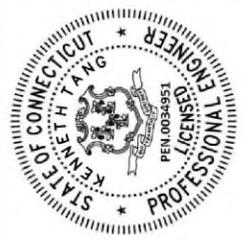
GUY WIRE CABLE LEVEL	HEIGHT	RADIUS	QTY/TYP	LENGTH	IT	TURNBUCKLE	PREFORM	THIMBL	ENDSLVE	SHCKLE
(E)3	160'	100'	6 @7/16x7 EHS	189'	1460#	3/4"x12" J-J	7/16" BG	1/2"	65265	5/8"
(E)2	110'	100'	3 @3/4x19 EHS	149'	7580#	1.25"x18" J-J	3/4" BG	7/8"	65269	1"
(E)1	50'	100'	3 @7/16x7 EHS	112'	2080#	3/4"x12" J-J	7/16" BG	1/2"	65265	5/8"

1. LENGTH GIVEN IS FOR ONE CABLE, NO EXTRA ALLOWED.
2. IT=INITIAL TENSION IN POUNDS AT 60°F.
3. CABLE LENGTHS ASSUME LEVEL GROUND.
4. TEMPORARY GUYING SHALL BE USED.
5. (FOR REGUYING) BIG GRIP DEAD-ENDS (PREFORMS) AND END SLEEVES MAY NOT BE RE-USED. TURNBUCKLES, SHACKLES AND THIMBLES MAY BE RE-USED FOR THE SAME CABLE SIZE IF NOT CORRODED.
6. NOTE THAT THE TENSION IN GUY LEVELS 2 AND 3 ARE TO BE MODIFIED FROM TYPICAL 10% TENSION. STAINLESS STEEL TAG(S) SHALL BE STAMPED WITH THE SPECIFIED TENSION:  
 "TENSION: 7580# (13%)" AND "TENSION: 1460# (07%)". THE TAGS SHALL BE ATTACHED TO THE TURNBUCKLES SETS WITH STAINLESS STEEL OR GALVANIZED WIRE. THIS IS TO PREVENT ADJUSTMENT TO TYPICAL VALUES AFTER A FUTURE ROUTINE TENSION CHECK.
7. PROPOSED=(P), EXISTING=(E).



PREPARED FOR:

**Centek Engineering, Inc.**  
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Branford, CT 06405



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CORTLAND, NY 13045  
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NO	DATE	DESCRIPTION	DWG	KT	CHK
1	18MAY22	INITIAL RELEASE			

**VZM PROSPECT NORTH  
WATERBURY RD  
PROSPECT, CT**

SHEET SCALE / UNITS  
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SHEET TITLE  
**MI CHECK LIST**

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SHEET # **S-4** FILENAME **22012**

**MODIFICATION INSPECTION NOTES:**

**GENERAL:**  
THE MI IS AN ON-SITE VISUAL AND HANDS-ON INSPECTION OF THE MODIFICATIONS INCLUDING A REVIEW OF CONSTRUCTION REPORTS AND ADDITIONAL PERTINENT DOCUMENTATION PROVIDED BY THE GENERAL CONTRACTOR (GC), AS WELL AS ANY INSPECTION DOCUMENTS PROVIDED BY 3RD PARTY INSPECTORS. THE MI IS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NAMELY THE MODIFICATION DRAWINGS AS DESIGNED BY THE ENGINEER OF RECORD (EOR).  
NO DOCUMENT, CODE OR POLICY CAN ANTICIPATE EVERY SITUATION THAT MAY ARISE. ACCORDINGLY, THIS CHECKLIST IS INTENDED TO SERVE AS A SOURCE OF GUIDING PRINCIPLES IN ESTABLISHING GUIDELINES FOR MODIFICATION INSPECTION.

THE MI IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AND IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF. THE MI INSPECTOR DOES NOT TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTEGRITY RESIDES WITH THE EOR AT ALL TIMES. THE MI INSPECTOR SHALL INSPECT AND NOTE CONFORMANCE/NONCONFORMANCE AND PROVIDE THE TOWER OWNER POINT OF CONTACT FOR EVALUATION.

TO ENSURE THAT THE REQUIREMENTS OF THE MI ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MI INSPECTOR BEGIN COMMUNICATING AND COORDINATING AS SOON AS A PURCHASE ORDER (PO) IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY. IF CONTACT INFORMATION IS NOT KNOWN, THE GC AND/OR INSPECTOR SHALL CONTACT THE OWNER POINT OF CONTACT.

**SERVICE LEVEL COMMITMENT:**  
THE FOLLOWING RECOMMENDATIONS AND SUGGESTIONS ARE OFFERED TO ENHANCE THE EFFICIENCY AND EFFECTIVENESS OF DELIVERING AN MI REPORT:

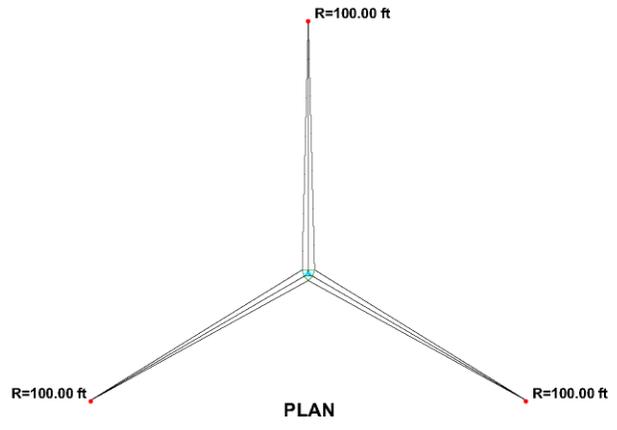
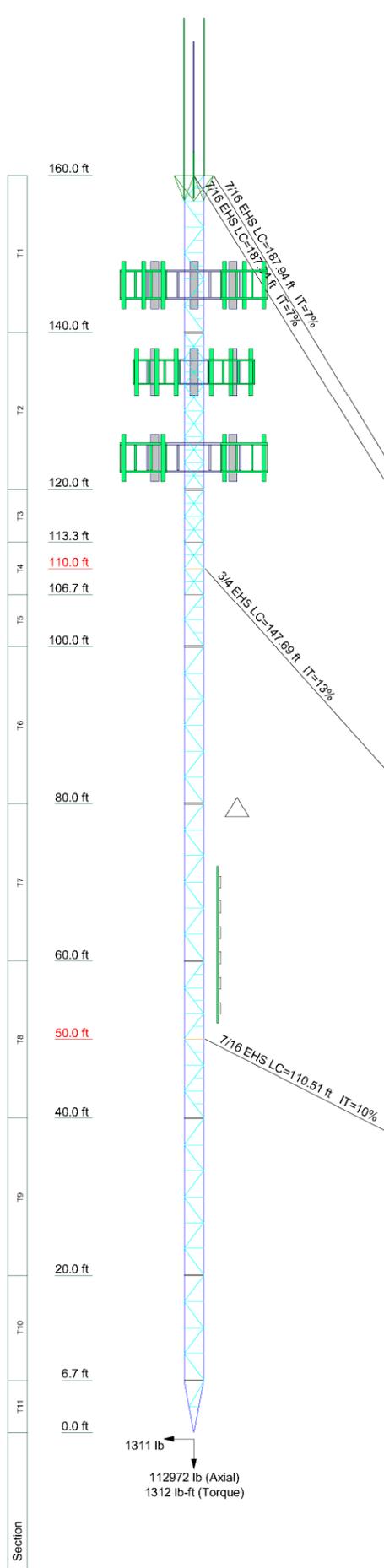
1. THE GC SHALL PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, PREFERABLY 10, TO THE MI INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR THE MI TO BE CONDUCTED.
2. THE GC AND MI INSPECTOR COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
3. WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MI INSPECTOR ON-SITE SIMULTANEOUSLY FOR ANY GUY WIRE TENSIONING OR RE-TENSIONING PERATIONS.
4. DURING MI TO HAVE ANY MINOR DEFICIENCIES CORRECTED DURING THE INITIAL MI. THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE MI CAREFULLY TO ENSURE ALL CONSTRUCTION FACILITIES ARE AT THEIR DISPOSAL WHEN THE MI INSPECTOR IS ON SITE.

**REQUIRED PHOTOS:**  
BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS, AT A MINIMUM, ARE TO BE TAKEN AND INCLUDED IN THE MI REPORT:

- \* PHOTOGRAPHS DURING THE REINFORCEMENT/MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
  - \*\* RAW MATERIALS
  - \*\* PHOTOS OF ALL CRITICAL DETAILS
  - \*\* FOUNDATION MODIFICATIONS
  - \*\* WELD PREPARATION
  - \*\* BOLT INSTALLATION
  - \*\* FINAL INSTALLED CONDITION
  - \*\* SURFACE COATING REPAIR
- \* POST CONSTRUCTION PHOTOGRAPHS  
\*\* FINAL INFIELD CONDITION  
PHOTOS OF ELEVATED MODIFICATIONS TAKEN ONLY FROM THE GROUND SHALL NOT BE CONSIDERED ADEQUATE OR SUFFICIENT.

**MI CHECKLIST**

Required	Report Item	Description
		<b>PRE-CONSTRUCTION</b>
X	MI Check list drawing	This checklist shall be included in the MI report.
NA	EOR Approved Shop Drawings	Once the pre-modification mapping is complete and prior to fabrication, the contractor shall provide detailed assembly drawings and/or shop drawings. These are to include, but are not limited to, a visual layout of the new reinforcement, existing reinforcement configuration, portholes, mounts, step pegs, safety climbs and other miscellaneous items which may affect successful installation of modifications. These drawings shall be submitted to the EOR for approval. Approved assembly/shop drawings shall be included in the MI report.
NA	Fabrication Inspection	A letter from the fabricator stating that the work was performed in accordance with industry standards and the contract documents. It shall be included in the MI report.
NA	Fabricator Certified Weld Inspection	A CWI shall inspect all welding performed on structural members during fabrication. A written report shall be included in the MI report.
NA	Material Test Reports (MTR)	Material test reports shall be provided for material used in construction and shall be included in the MI report.
NA	Fabricator NDE Inspection Report	Critical shop welds that require testing are noted on these contract drawings. A certified NDT Inspector shall perform a Non-Destructive examination and the report included in the MI report.
NA	NDE of the pole to base plate connection	NDE of the pole to base plate connection is required and a written report shall be included in the MI report.
X	Packing Slips/ Batch Tickets	The Material shipping lists shall be included in the MI report.
NA	Additional Testing and Inspections:	
		<b>CONSTRUCTION</b>
X	Foundation Inspections	A visual observation of the excavation, epoxy holes, and placed rebar shall be performed before placing the concrete. A sealed written report shall be included in the MI report.
X	Concrete comp. strength, slump tests	The concrete mix design, slump tests, and compressive strength tests shall be part of the foundation report.
X	Earthwork	Foundation sub-grades shall be inspected and approved by an approved foundation inspector and results included in the foundation report.
NA	Microspile/rock anchors	Microspile/rock anchors shall be inspected by the foundation inspection vendor and shall be included in the foundation inspection report.
NA	Post-installed anchor rod verification	Additional testing and/or inspection requirements are noted in these contract documents.
NA	Base Plate grout verification	Post-installed anchor rod verification shall be performed and a report shall be included in the MI report.
NA	Field Certified Weld Inspection	The general contractor shall provide documentation to the MI inspector that certifies that the grout was removed and/or installed in accordance with contractor documents for inclusion in the MI report.
NA	On-Site cold galvanizing verification	An AWS certified weld inspector shall inspect and test field welds, in accordance with AWS D11.1M: "Structural welding code - steel". A report shall be provided. NDE of field welds shall be performed as required per contract documents. The NDE report shall be included in the CWI report.
X	Twist & Plumb, Cable tensions	The general contractor shall provide written and photographic documentation to the MI inspector verifying that any on-site cold galvanizing was applied per manufacturer specifications and applicable standards. The cold galvanizing compound is to be approved by the tower owner.
X	GC AS-built documents	The general contractor shall submit a legible copy of the original design drawings either stating "Installed as designed" or noting any changes that were required and approved by the engineer of record. EOR/RFI forms approving all changes shall be submitted when the EOR is specifying additional inspections. Description and applicable standards shall be noted.
NA	Additional Testing and Inspections:	
		<b>POST-CONSTRUCTION</b>
NA	Construction compliance letter	A letter from the general contractor stating that the workmanship was performed in accordance with industry standards and these contract drawings, including listing additional parties to the modification process.
NA	Post-installed anchor rod pull tests	Post-installed anchor rods shall be tested in accordance with contract documents and a report shall be provided indicating testing results.
X	Photographs	Photographs shall be included in MI report. Photos shall document all phases of the construction. The photos shall be organized in a manner that easily identifies the exact location of the photo.
NA	Bolt installation and verification report	The MI inspector shall verify the installation and tightness of 10% of all non pre-tensioned bolts installed as part of the modification. The MI inspector shall loosen the nut and verify the bolt hole size and condition. The MI report shall contain the completed bolt installation verification report, including the supporting photographs.
NA	Punchlist development and correction documentation	Final punchlist indicating all nonconformance(s) identified and the final resolution and approval.
NA	MI Inspector redline or record drawings	The MI inspector shall observe and report any discrepancies between the contractor's redline drawing and the actual completed installation.
NA	Additional Testing and Inspections:	



**DESIGNED APPURTENANCE LOADING**

TYPE	ELEVATION	TYPE	ELEVATION
2.5"ODx15' Omni	160	(2) SWCP 2x5514 w. MtgPipe (E-VZW-Alpha)	135
2.5"ODx20' Omni	160	(2) SWCP 2x5514 w. MtgPipe (E-VZW-Beta)	135
2.0"ODx15' Omni	160	LNx-8514DS-VTM w. Mtg. Pipe (E-VZW-Gamma)	135
DB404	160	ORAN RF4439d-25A RRU (P-VZW-Alpha)	135
2" Sch40 x 8ft (Long antenna pipe)	160	ORAN RF4439d-25A RRU (P-VZW-Beta)	135
Valmont 13' Standoff Frame (set of 3)	146	ORAN RF4439d-25A RRU (P-VZW-Gamma)	135
APXVSPP18-C-A20 w. Mtg Pipe (Sprint)	146	ORAN RF4440d-13A RRU (P-VZW-Alpha)	135
APXVSPP18-C-A20 w. Mtg Pipe (Sprint)	146	ORAN RF4440d-13A RRU (P-VZW-Beta)	135
APXVSPP18-C-A20 w. Mtg Pipe (Sprint)	146	ORAN RF4440d-13A RRU (P-VZW-Gamma)	135
LLPX310R-V1 w. MtgPipe (Sprint)	146	RVZDC-6627-PF-48 (12Circuit OVP) (P-VZW)	135
LLPX310R-V1 w. MtgPipe (Sprint)	146	Ericsson RRUS-32 B2 (1900) (AT&T)	124
LLPX310R-V1 w. MtgPipe (Sprint)	146	Ericsson RRUS-32 B2 (1900) (AT&T)	124
Nokia FWHR 2.5 RRH (Sprint)	146	10' Pirod Frame (set of 3) (AT&T)	124
Nokia FWHR 2.5 RRH (Sprint)	146	(2) KMW AM-X-CD-16-65-00T w. Mtg Pipe (AT&T)	124
Nokia FWHR 2.5 RRH (Sprint)	146	KMW AM-X-CD-16-65-00T w. Mtg Pipe (AT&T)	124
TD-RRH-8x20-2500 (Sprint)	146	KMW AM-X-CD-16-65-00T w. Mtg Pipe (AT&T)	124
TD-RRH-8x20-2500 (Sprint)	146	(2) SBNH-1D6565C w. Mtg Pipe (AT&T)	124
TD-RRH-8x20-2500 (Sprint)	146	HPA-65R-BUU-H8 w. MtgPipe (AT&T)	124
ALU 800MHz 2x50W RRH w. Filter (Sprint)	146	HPA-65R-BUU-H8 w. MtgPipe (AT&T)	124
ALU 800MHz 2x50W RRH w. Filter (Sprint)	146	HPA-65R-BUU-H8 w. MtgPipe (AT&T)	124
ALU 800MHz 2x50W RRH w. Filter (Sprint)	146	TMA Dual Band 850/1900 (AT&T)	124
ALU RRH 4x45 65 (1900 MHz) (Sprint)	146	TMA Dual Band 850/1900 (AT&T)	124
ALU RRH 4x45 65 (1900 MHz) (Sprint)	146	RRUS-11 (AT&T)	124
ALU RRH 4x45 65 (1900 MHz) (Sprint)	146	RRUS-11 (AT&T)	124
Distro Box (Sprint)	146	RRUS-11 (AT&T)	124
12' booms (set of 3) (E-VZW)	135	Ericsson RRUS-32 B2 (1900) (AT&T)	124
Samsung MT6407-77A (P-VZW-Alpha)	135	RxxDC-4750-PF-48 Surge Protector (AT&T)	120
Samsung MT6407-77A (P-VZW-Beta)	135	DB224	72 - 52
Samsung MT6407-77A (P-VZW-Gamma)	135	VZW-2022	0
(2) NHH-65B-R2B w. Mtg Pipe (P-VZW-Alpha)	135		
(2) NHH-65B-R2B w. Mtg Pipe (P-VZW-Beta)	135		
(2) NHH-65B-R2B w. Mtg Pipe (P-VZW-Gamma)	135		

**TOWER DESIGN NOTES**

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 97 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 50 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 50 mph wind.
6. Tower Structure Class II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. Connections use galvanized A325 bolts, nuts and locking devices. Installation per TIA/EIA-222 and AISC Specifications.
9. Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
10. Welds are fabricated with ER-70S-6 electrodes.
11. (E)xisting, (P)roposed and (R)eserved equipment.
12. TOWER RATING: 99.5%

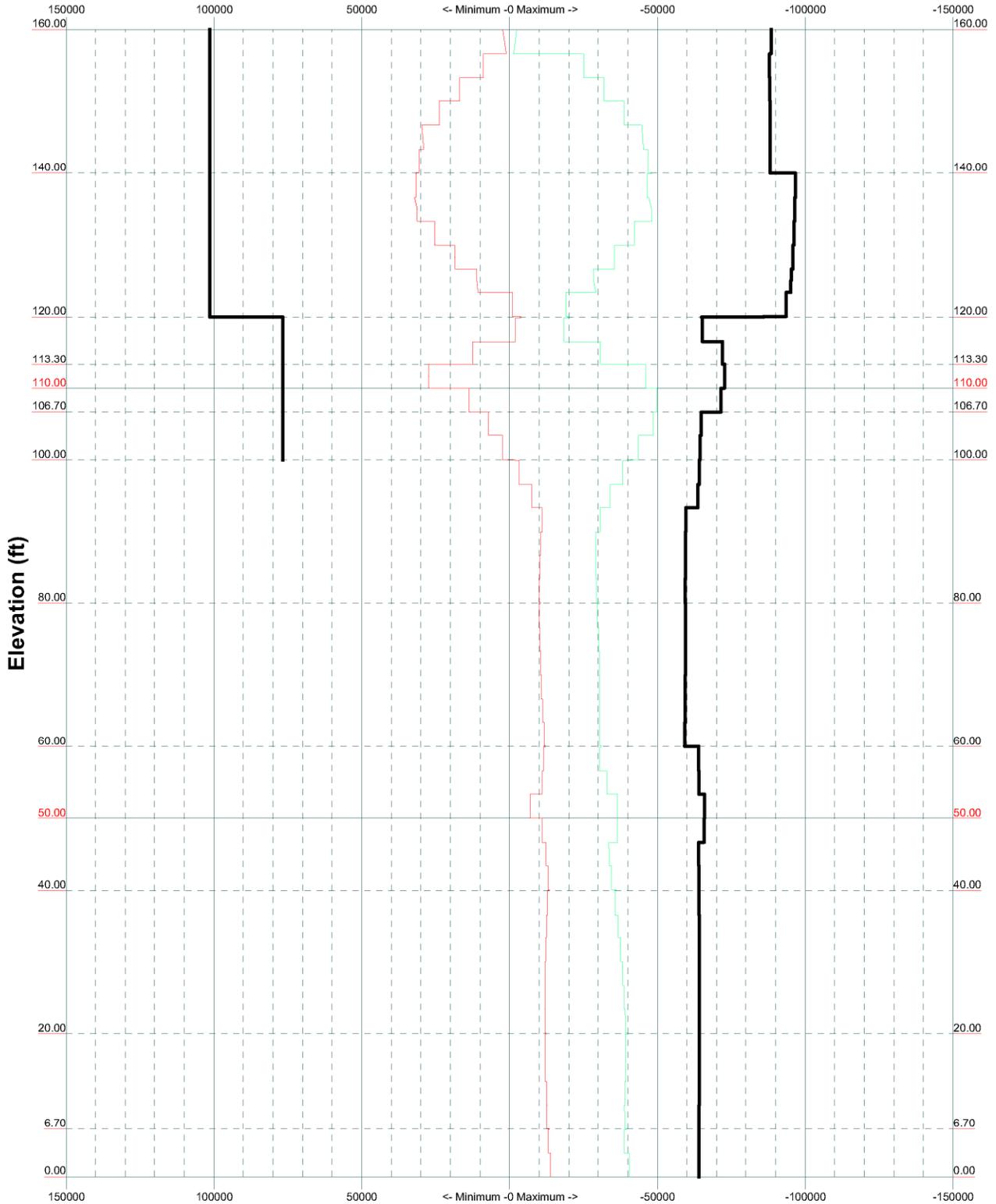
<p><b>Armor Tower, Inc.</b> 9 North Main St. Cortland, NY 13045 Phone: (607) 591-5381 FAX: (866) 870-0840</p>	<p>Job: <b>160' Guyed Tower Reinforcement</b></p>		
	<p>Project: <b>Verizon Wireless: Prospect North, CT</b></p>		
	Client: Centek Engineering	Drawn by: PEP	App'd:
	Code: TIA-222-G	Date: 05/23/22	Scale: NTS
	Path:		Dwg No. E-1



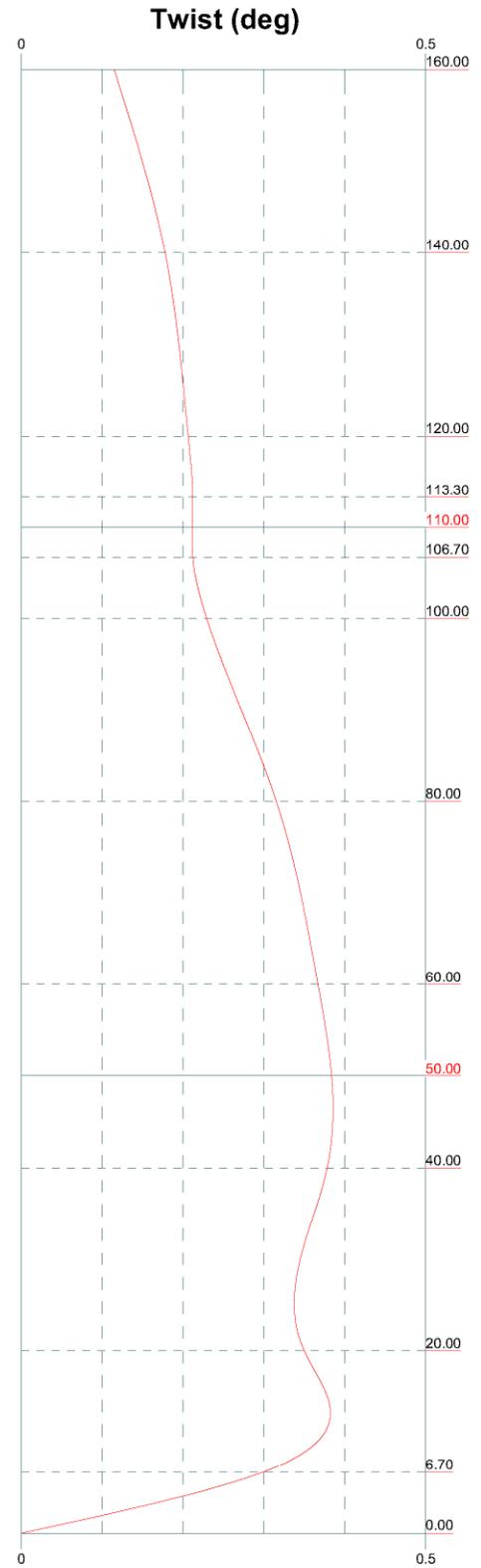
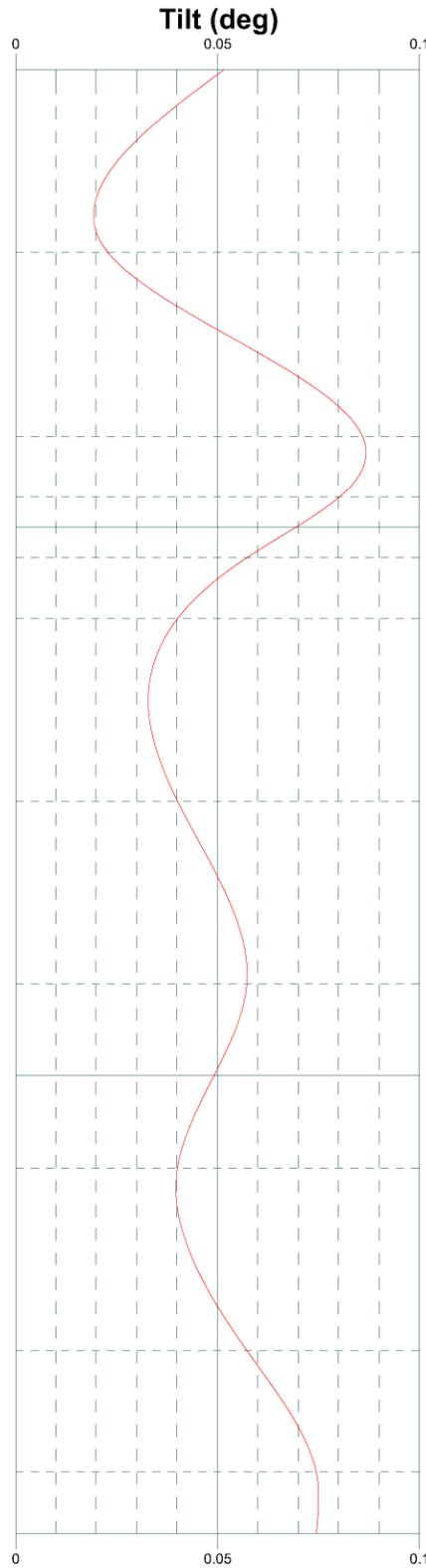
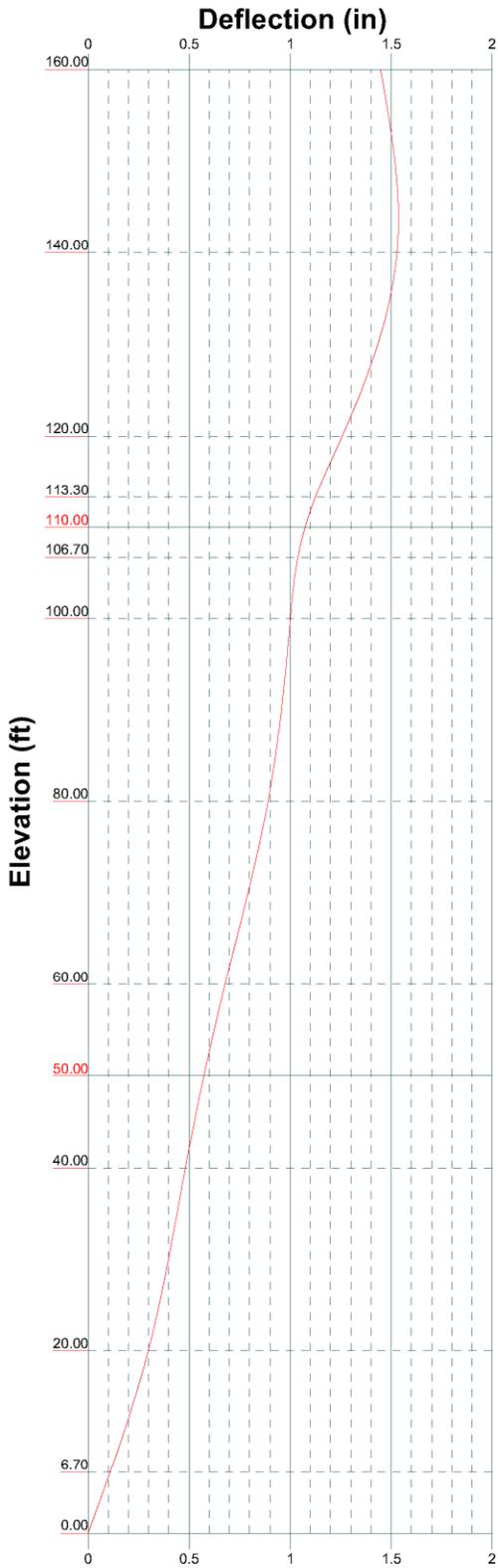
TIA-222-G - 97 mph/50 mph 0.7500 in Ice Exposure C

Leg Capacity ———

Leg Compression (lb)



 <b>Armor Tower, Inc.</b> 9 North Main St. Cortland, NY 13045 Phone: (607) 591-5381 FAX: (866) 870-0840	<b>Job: 160' Guyed Tower Reinforcement</b>		
	Project: <b>Verizon Wireless: Prospect North, CT</b>		
	Client: Centek Engineering	Drawn by: PEP	App'd:
	Code: TIA-222-G	Date: 05/23/22	Scale: NTS
	Path:		Dwg No. E-3



<p><b>Armor Tower, Inc.</b> 9 North Main St. Cortland, NY 13045 Phone: (607) 591-5381 FAX: (866) 870-0840</p>	<b>Job: 160' Guyed Tower Reinforcement</b>		
	Project: <b>Verizon Wireless: Prospect North, CT</b>		
	Client: Centek Engineering	Drawn by: PEP	App'd:
	Code: TIA-222-G	Date: 05/23/22	Scale: NTS
	Path:		Dwg No. E-5

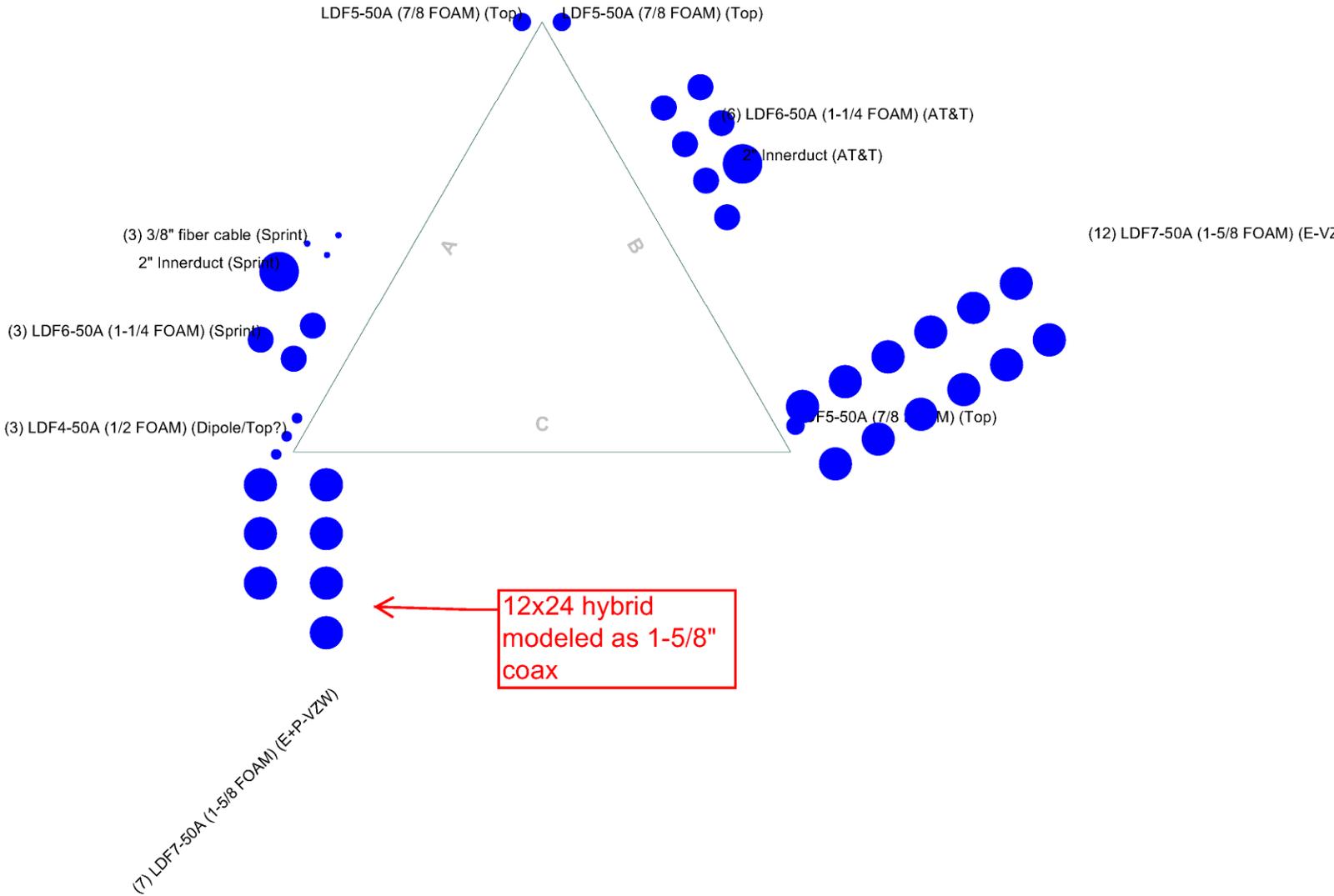
# Feed Line Plan

Round

Flat

App In Face

App Out Face



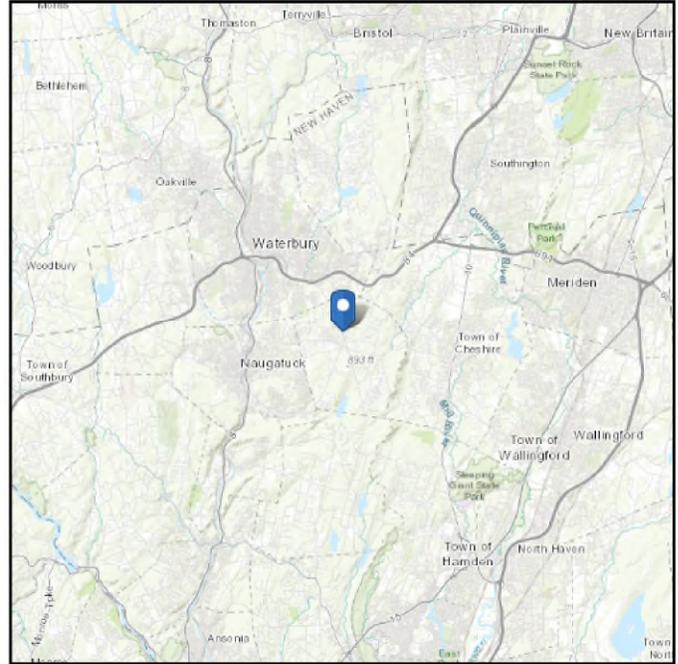
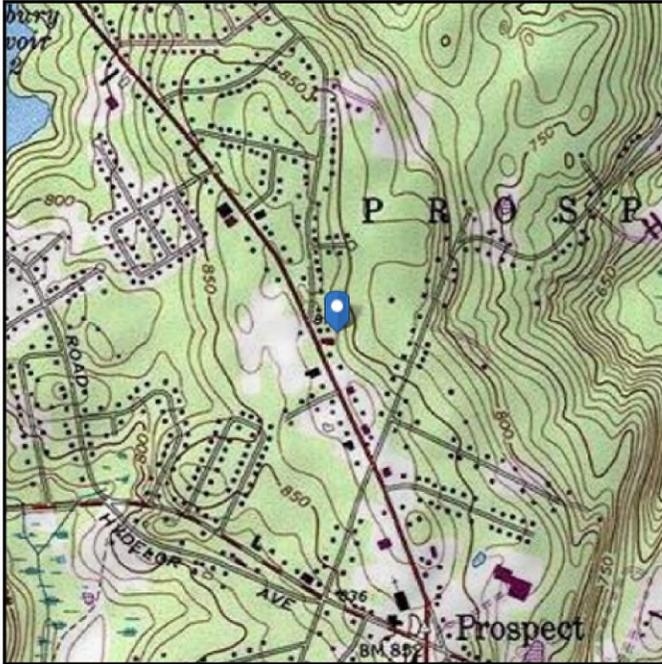
	<b>Armor Tower, Inc.</b> 9 North Main St. Cortland, NY 13045 Phone: (607) 591-5381 FAX: (866) 870-0840			<b>Job: 160' Guyed Tower Reinforcement</b>		
	Project: Verizon Wireless: Prospect North, CT		Drawn by: PEP		App'd:	
	Client: Centek Engineering		Date: 05/23/22		Scale: NTS	
	Code: TIA-222-G		Path:		Dwg No. E-7	

# ASCE 7 Hazards Report

**Address:**  
No Address at This Location

**Standard:** ASCE/SEI 7-10  
**Risk Category:** II  
**Soil Class:** D - Stiff Soil

**Elevation:** 869.75 ft (NAVD 88)  
**Latitude:** 41.510928  
**Longitude:** -72.982327



## Wind

### Results:

Wind Speed:	122 Vmph
10-year MRI	76 Vmph
25-year MRI	86 Vmph
50-year MRI	92 Vmph
100-year MRI	99 Vmph

← 125/97 per CT SBC

**Date Accessed:** 7/20/2021  
**Source:** ASCE/SEI 7-10, Fig. 26.5-1A and Figs. CC-1–CC-4, and Section 26.5.2, incorporating errata of March 12, 2014

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-10 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

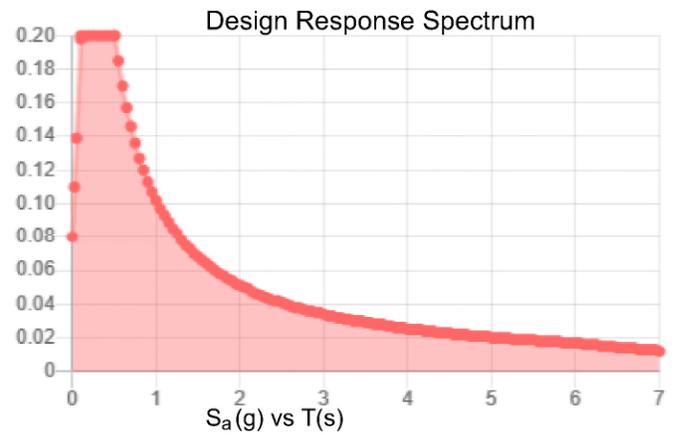
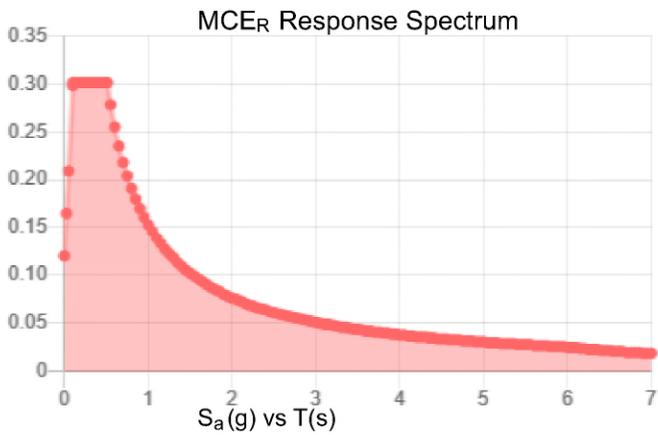
Site is in a hurricane-prone region as defined in ASCE/SEI 7-10 Section 26.2. Glazed openings need not be protected against wind-borne debris.

**Site Soil Class:** D - Stiff Soil

**Results:**

$S_s$ :	0.188	$S_{DS}$ :	0.2
$S_1$ :	0.064	$S_{D1}$ :	0.102
$F_a$ :	1.6	$T_L$ :	6
$F_v$ :	2.4	PGA :	0.097
$S_{MS}$ :	0.301	PGA <sub>M</sub> :	0.156
$S_{M1}$ :	0.153	$F_{PGA}$ :	1.6
		$I_e$ :	1

**Seismic Design Category** B



**Data Accessed:**

Tue Nov 30 2021

**Date Source:**

USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

## Ice

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### Results:

Ice Thickness: 0.75 in.

Concurrent Temperature: 15 F

Gust Speed: 50 mph

**Data Source:** Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8

**Date Accessed:** Tue Nov 30 2021

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 50-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

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The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE 7 standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE 7 Hazard Tool.



Maser Consulting Connecticut  
1055 Washington Boulevard  
Stamford, CT 06901  
203.324.0800  
peter.albano@colliersengineering.com

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## Replacement Antenna Mount Analysis Report and PMI Requirements

Mount Analysis-R

SMART Tool Project #: 10115372  
Maser Consulting Connecticut Project #: 21781146A

November 15, 2021

### Site Information

Site ID: 468765-VZW / PROSPECT NORTH CT  
Site Name: PROSPECT NORTH CT  
Carrier Name: Verizon Wireless  
Address: 54 Watterbury Rd  
Prospect, Connecticut 06712  
New Haven County  
Latitude: 41.510928°  
Longitude: -72.982327°

### Structure Information

Tower Type: 160-Ft Self Support  
Mount Type: 12.50-Ft Sector Frame

FUZE ID # 2011031

### Analysis Results

Sector Frame: 40.4% Pass

### \*\*\*Contractor PMI Requirements:

Included at the end of this MA report

Available & Submitted via portal at <https://pmi.vzwsmart.com>

Contractor - Please Review Specific Site PMI Requirements Upon Award

Requirements may also be Noted on A & E drawings

For additional questions and support, please reach out to:

[pmisupport@colliersengineering.com](mailto:pmisupport@colliersengineering.com)

Report Prepared By: Nathan LaPorte



## **Executive Summary:**

The objective of this report is to summarize the analysis results of the antenna support mount including the proposed modifications at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards.

This analysis is inclusive of the mount structure only and does not address the structural capacity of the supporting structure. This mounting frame was not analyzed as an anchor attachment point for fall protection. All climbing activities are required to have a fall protection plan completed by a competent person.

## **Sources of Information:**

<b>Document Type</b>	<b>Remarks</b>
Radio Frequency Data Sheet (RFDS)	Verizon RFDS Site ID: 675023, dated October 25, 2021
Mount Mapping Report	Hudson Design Group, LLC Site ID: 468765, dated January 12, 2021
Previous Mount Analysis	Maser Consulting Project #: 21781146A, dated November 2, 2021
Mount Specification	Site Pro 1 Part #: VFA12-HD

## **Analysis Criteria:**

Codes and Standards:	ANSI/TIA-222-H
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), $V_{ULT}$ : 118 mph
	Ice Wind Speed (3-sec. Gust): 50 mph
	Design Ice Thickness: 1.00 in
	Risk Category: II
	Exposure Category: C
	Topographic Category: 1
	Topographic Feature Considered: N/A
	Topographic Method: N/A
	Ground Elevation Factor, $K_e$ : 0.969
Seismic Parameters:	$S_s$ : 0.197 g
	$S_1$ : 0.054 g
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph
	Maintenance Live Load, $L_v$ : 250 lbs.
	Maintenance Live Load, $L_m$ : 500 lbs.
Analysis Software:	RISA-3D (V17)

**Final Loading Configuration:**

The following equipment has been considered for the analysis of the mounts:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
134.50	135.00	1	Andrew	LNx-8514DS-VTM	Retained
		2	Swedcom	SWCP2X5514	
		6	Commscope	NHH-65B-R2B	Added
		3	Samsung	MT6407-77A	
		3	Samsung	RF4439d-25A	
		3	Samsung	RF4440d-13A	
		1	Raycap	RVZDC-6627-PF-48	

It is acceptable to install up to any three (3) of the OVP model numbers listed below as required at any location other than the mount face without affecting the structural capacity of the mount. If OVP units are installed on the mount face, a mount re-analysis may be required unless replacing an existing OVP.

Model Number	Ports	AKA
DB-B1-6C-12AB-0Z	6	OVP-6
RVZDC-6627-PF-48	12	OVP-12

**Standard Conditions:**

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting Connecticut to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.

Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.

6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
  - o Channel, Solid Round, Angle, Plate      ASTM A36 (Gr. 36)
  - o HSS (Rectangular)                              ASTM 500 (Gr. B-46)
  - o Pipe    ASTM A53 (Gr. B-35)
  - o Threaded Rod                                      F1554 (Gr. 36)
  - o Bolts    ASTM A325

**Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting Connecticut.**

**Analysis Results:**

Component	Utilization %	Pass/Fail
Tieback	7.4%	Pass
Standoff Vertical	11.1%	Pass
Antenna Pipe	39.8%	Pass
Standoff Diagonal	8.0%	Pass
Standoff Plate	40.4%	Pass
Standoff Horizontal	26.2%	Pass
Face Horizontal	30.7%	Pass
Mount Connection	13.3 %	Pass

<b>Structure Rating – (Controlling Utilization of all Components)</b>	<b>40.4%</b>
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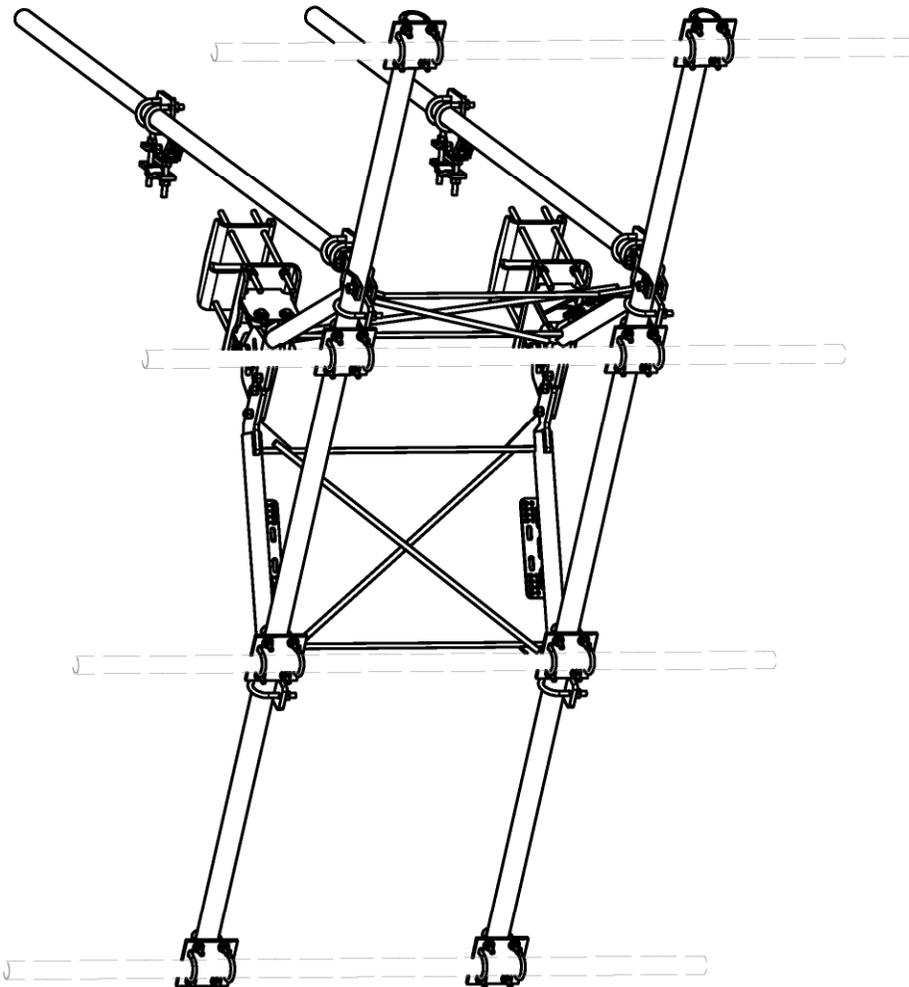
**Recommendation:**

The proposed antenna mounts are **SUFFICIENT** for the final loading configuration and do not require modifications.

ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

**Attachments:**

1. Mount Specification
2. Analysis Calculations
3. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
4. Antenna Placement Diagrams
5. TIA Adoption and Wind Speed Usage Letter



ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	2	X-VFAW	SUPPORT ARM		71.41	142.81
2	1	X-HDCAMTBW	CLAMP WELDMENT FOR BCAM-HD		33.86	33.86
3	1	X-MHTPHD	MULTI-HOLE TAPER PLATE WELDMENT		36.24	36.24
4	2	X-VFAPL4	VFA-HD PIVOT PLATE	12 in	15.88	31.77
5	2	X-LCBP4	BENT BACKING PLATE	13 in	19.00	38.01
6	1	X-HDCAMSS	ANGLE ADJUSTMENT WELDMENT FOR BCAM-HD		16.39	16.39
7	4	X-SPTB	SLIDING PIPE TIE BACK PLATE	5 1/2 in	5.87	23.49
8	1	X-HDCAMSP	POSITIONING PLATE WELDMENT FOR BCAM-HD		2.58	2.58
9	4	X-TBCA	TIE BACK CLIP ANGLE		2.01	8.02
10	8	SCX2	CROSSOVER PLATE	7 in	4.80	38.37
11	4	MCP	CLAMP HALF 1/2" THICK, 11-5/8" LONG	12 1/16 in	14.37	57.48
12	8	DCP	1/2" THICK, 5-3/4" CENTER TO CENTER CLAMP HALF	8 1/8 in	2.36	18.90
13	2	P2126	2-3/8" X 126" (2" SCH. 40) GALVANIZED PIPE	126 in	40.75	81.50
14	2	P30150	2-7/8" X 150" (2-1/2" SCH. 40) GALVANIZED PIPE	150 in	76.94	153.87
15	4	A34212	3/4" x 2-1/2" UNC HEX BOLT (A325)	2 1/2 in	0.48	1.92
16	4	G34FW	3/4" HDG USS FLATWASHER		0.06	0.24
17	4	G34LW	3/4" HDG LOCKWASHER		0.04	0.17
18	4	G34NUT	3/4" HDG HEAVY 2H HEX NUT		0.21	0.85
19	8	G58R-18	5/8" x 18" THREADED ROD (HDG.)	18 in	0.40	3.19
20	4	G58R-12	5/8" x 12" THREADED ROD (HDG.)		1.05	4.18
21	4	G58R-8	5/8" x 8" THREADED ROD (HDG.)		0.70	2.79
22	4	X-UB5300	5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT (HDG.)		1.15	4.60
23	8	X-UB5258	5/8" X 2-5/8" X 4-1/2" X 2" U-BOLT (HDG.)		1.00	8.00
24	2	G5807	5/8" x 7" HDG HEX BOLT GR5 FULL THREAD	7 in	0.70	1.41
25	1	G5806	5/8" x 6" HDG HEX BOLT GR5 FULL THREAD	6 in	0.62	0.62
26	8	G5804	5/8" x 4" HDG HEX BOLT GR5		0.44	3.55
27	4	G5802	5/8" x 2" HDG HEX BOLT GR5		0.27	1.08
28	8	A582114	5/8" x 2-1/4" HDG A325 HEX BOLT	2 1/4 in	0.31	2.50
29	25	G58FW	5/8" HDG USS FLATWASHER	1/8 in	0.07	1.76
30	66	G58LW	5/8" HDG LOCKWASHER		0.03	1.72
31	71	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	9.22
32	32	X-UB1300	1/2" X 3" X 5" X 2" GALV U-BOLT		0.74	23.64
33	16	X-UB1212	1/2" X 2" X 3" X 1-1/4" U-BOLT (HDG.)		0.60	9.56
34	64	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	2.18
35	64	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.89
36	64	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	4.58
					TOTAL WT. #	738.06

**PARTS LIST**

**SURE PRO**  
A Valmont COMPANY

Locations:  
New York, NY  
Atlanta, GA  
Los Angeles, CA  
Plymouth, IN  
Houston, TX  
Dallas, TX

Engineering  
Support Team:  
1-888-753-7446

Part No. **VFA12-HD**  
Dwg. No. **VFA12-HD**

DESCRIPTION  
**12' 6" HEAVY DUTY V-FRAME ASSEMBLY WITH TWO STIFF ARMS**

DRAWN BY: **CEK** 1/25/2017  
ENG. APPROVAL

CHECKED BY: **BMC** 12/13/2017

CLASS: **81** SUB: **02**

CUSTOMER: **CUSTOMER**

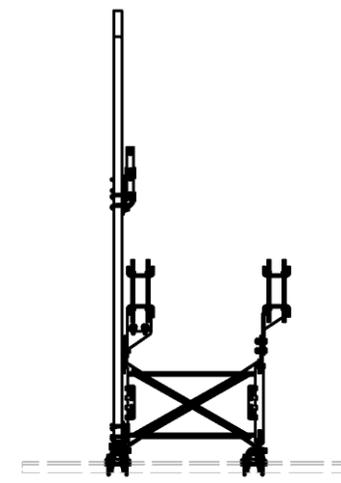
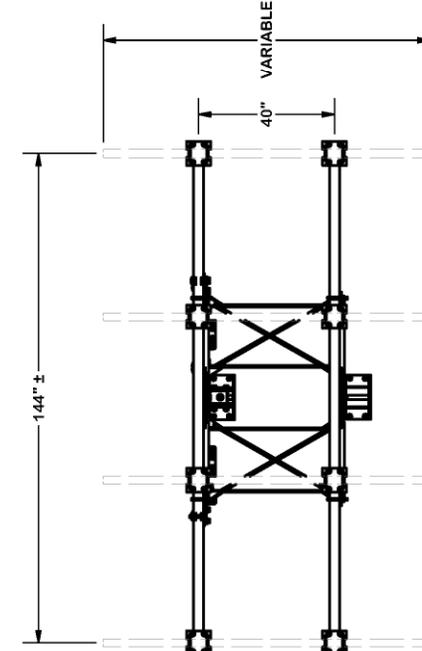
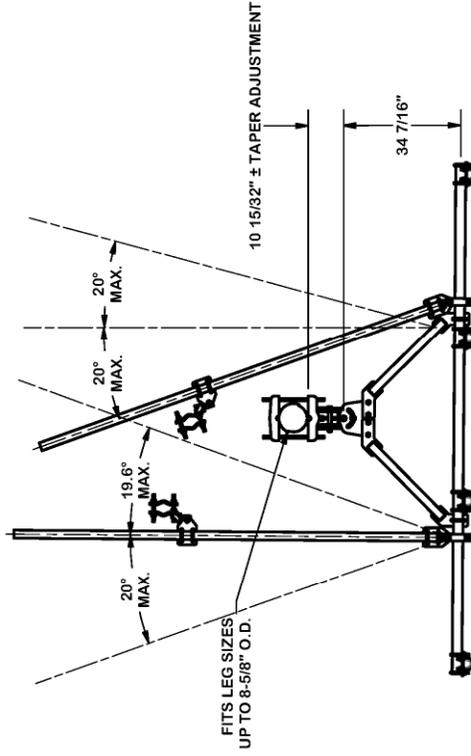
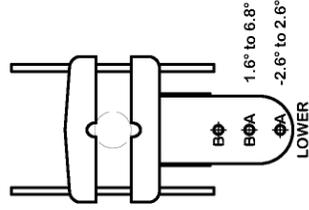
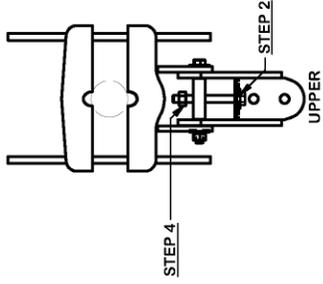
**TOLERANCE NOTES**  
TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:  
SAWED, SHEARED AND GAS CUT EDGES ( $\pm 0.030"$ )  
DRILLED AND GAS CUT HOLES ( $\pm 0.030"$ ) - NO CONING OF HOLES  
LASER CUT EDGES AND HOLES ( $\pm 0.010"$ ) - NO CONING OF HOLES  
BENDS ARE  $\pm 1/2$  DEGREE  
ALL OTHER MACHINING ( $\pm 0.030"$ )  
ALL OTHER ASSEMBLY ( $\pm 0.060"$ )

PROPRIETARY NOTE: DIMENSIONS CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
D	UPDATED BCAM VERSION 1 TO BCAM VERSION 2		CEK	6/29/2018
C	UPDATED PIN LEG CONNECTION TO B-CAM CONNECTION		CEK	12/7/2017
B	CHANGED TIE-BACK BACK CONNECTION		CEK	7/31/2017
A	CHANGED TIE-BACK FRONT CONNECTION		CEK	2/2/2017
REVISION HISTORY				

**ANGLE CALIBRATING PROCEDURE:**

1. MEASURE TOWER TAPER AND PICK LOWER BRACKET HOLE:
  - HOLE A = -2.6° TO 2.6°
  - HOLE B = 1.6° TO 6.8°
2. USE CALIBRATING BOLT TO ADJUST FRAME TO DESIRED TAPER
3. TORQUE LOCKING BOLTS TO 100 ft.-lbs.
4. ADVANCE LOCKING NUT TO POSITIONING PLATE, THEN TIGHTEN.



**TOLERANCE NOTES**

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:  
 SAWED, SHEARED AND GAS CUT EDGES ( $\pm 0.0307$ )  
 DRILLED AND GAS CUT HOLES ( $\pm 0.0307$ ) - NO CONING OF HOLES  
 LASER CUT EDGES AND HOLES ( $\pm 0.0107$ ) - NO CONING OF HOLES  
 BENDS ARE  $\pm 1/2$  DEGREE  
 ALL OTHER MACHINING ( $\pm 0.0307$ )  
 ALL OTHER ASSEMBLY ( $\pm 0.0607$ )  
 PROPRIETARY NOTE: DIMENSIONS CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
D	UPDATED BCAM VERSION 1 TO BCAM VERSION 2		CEK	8/29/2018
C	UPDATED PIN LEG CONNECTION TO B-CAM CONNECTION		CEK	12/7/2017
B	CHANGED TIE-BACK BACK CONNECTION		CEK	7/31/2017
A	CHANGED TIE-BACK FRONT CONNECTION		CEK	2/2/2017
	REVISION HISTORY			

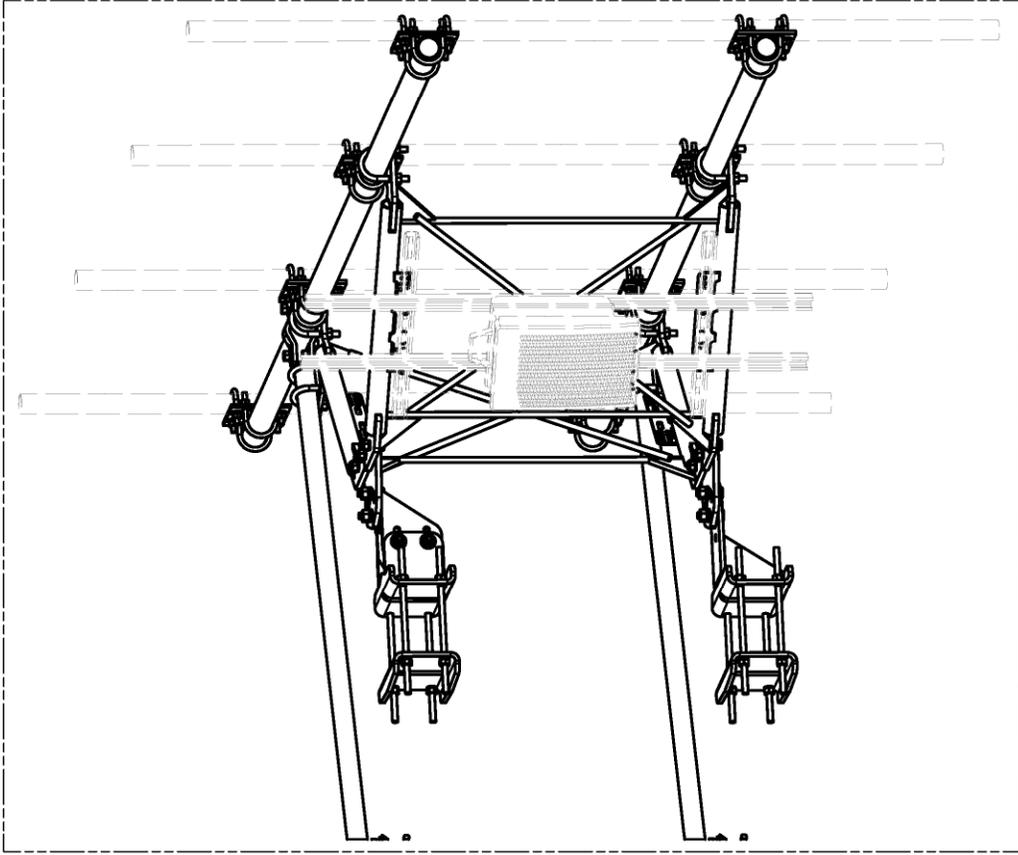
DESCRIPTION  
 12' 6" HEAVY DUTY  
 V-FRAME ASSEMBLY  
 WITH TWO STIFF ARMS

CPD NO.	CEK	1/25/2017	ENG. APPROVAL
CLASS	81	SUB	02
DRAWN BY	CEK	CHECKED BY	BMC
DRAWING USAGE	CUSTOMER	CHECKED BY	BMC
			12/13/2017



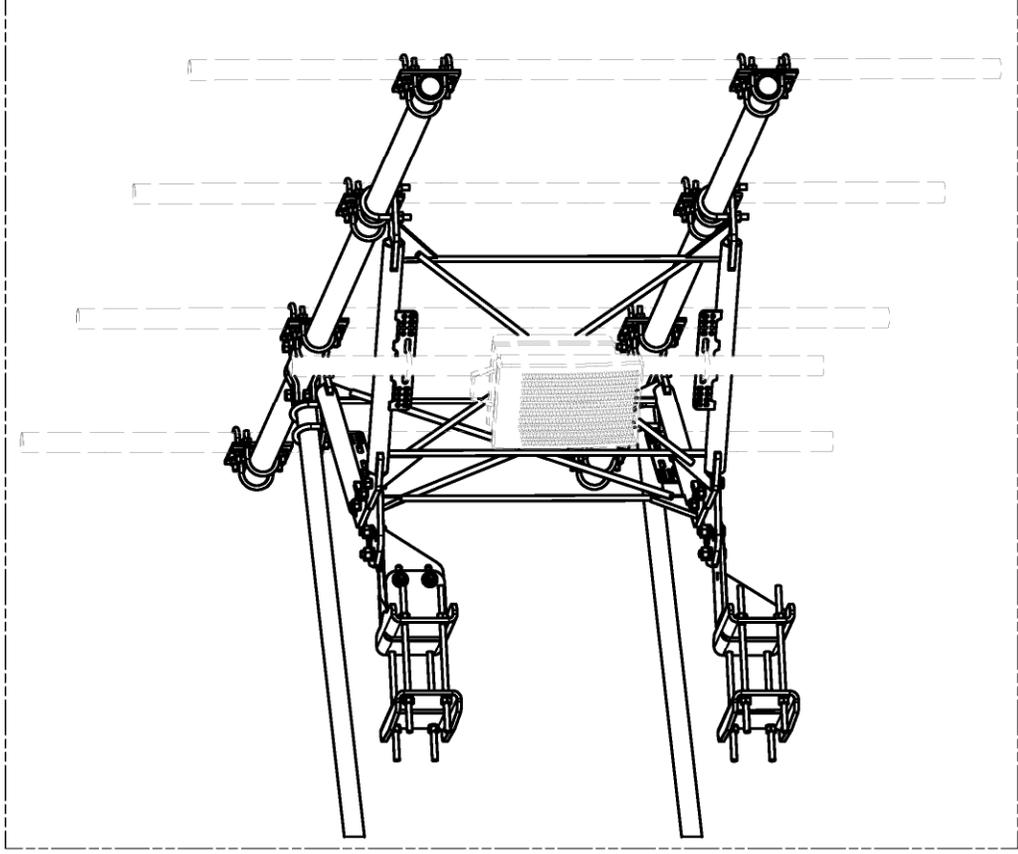
PART NO. VFA12-HD  
 DWG. NO. VFA12-HD

Locations:  
 New York, NY  
 Atlanta, GA  
 Los Angeles, CA  
 Plymouth, IN  
 Dallas, TX  
 Engineering  
 Support Team:  
 1-888-753-7446



UNISTRUT AND HARDWARE  
SOLD SEPARATELY.

REQUIRES 3/8" HARDWARE



EQUIPMENT PIPE AND HARDWARE  
SOLD SEPARATELY.

REQUIRES 1/2" HARDWARE  
AND 2-3/8" TO 4-1/2" O.D. PIPE

**TOLERANCE NOTES**

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:  
 SAWED, SHEARED AND GAS CUT EDGES ( $\pm 0.030"$ )  
 DRILLED AND GAS CUT HOLES ( $\pm 0.030"$ ) - NO CONING OF HOLES  
 LASER CUT EDGES AND HOLES ( $\pm 0.010"$ ) - NO CONING OF HOLES  
 BENDS ARE  $\pm 1/2$  DEGREE  
 ALL OTHER MACHINING ( $\pm 0.030"$ )  
 ALL OTHER ASSEMBLY ( $\pm 0.060"$ )

PROPRIETARY NOTE: INFORMATION CONTAINED IN THIS DRAWING IS PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION  
 12' 6" HEAVY DUTY  
 V-FRAME ASSEMBLY  
 WITH TWO STIFF ARMS

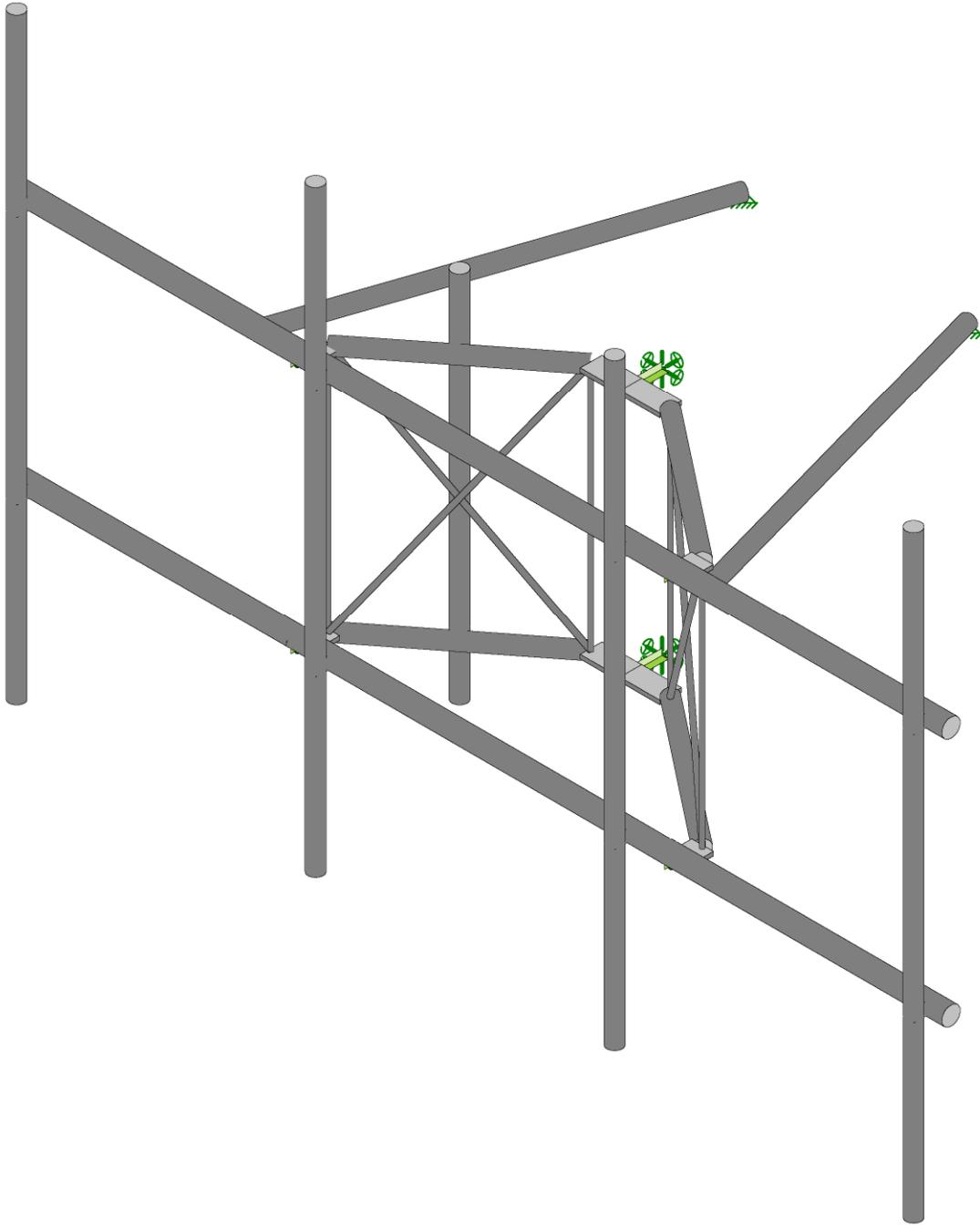
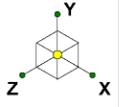
CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
81	CEK	1/25/2017	VFA12-HD
CLASS	DRAWING USAGE	CHECKED BY	DWG. NO.
81	CUSTOMER	BMC	VFA12-HD
SUB			
02			



Locations:  
 New York, NY  
 Atlanta, GA  
 Los Angeles, CA  
 Plymouth, IN  
 Dallas, TX  
 Houston, TX

Engineering  
 Support Team:  
 1-888-753-7446

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
D	UPDATED BCAM VERSION 1 TO BCAM VERSION 2		CEK	8/29/2018
C	UPDATED PIN LEG CONNECTION TO B-CAM CONNECTION		CEK	12/7/2017
B	CHANGED TIE-BACK BACK CONNECTION		CEK	7/31/2017
A	CHANGED TIE-BACK FRONT CONNECTION		CEK	2/2/2017
	REVISION HISTORY			



Envelope Only Solution

Maser Consulting

NL

21781146A

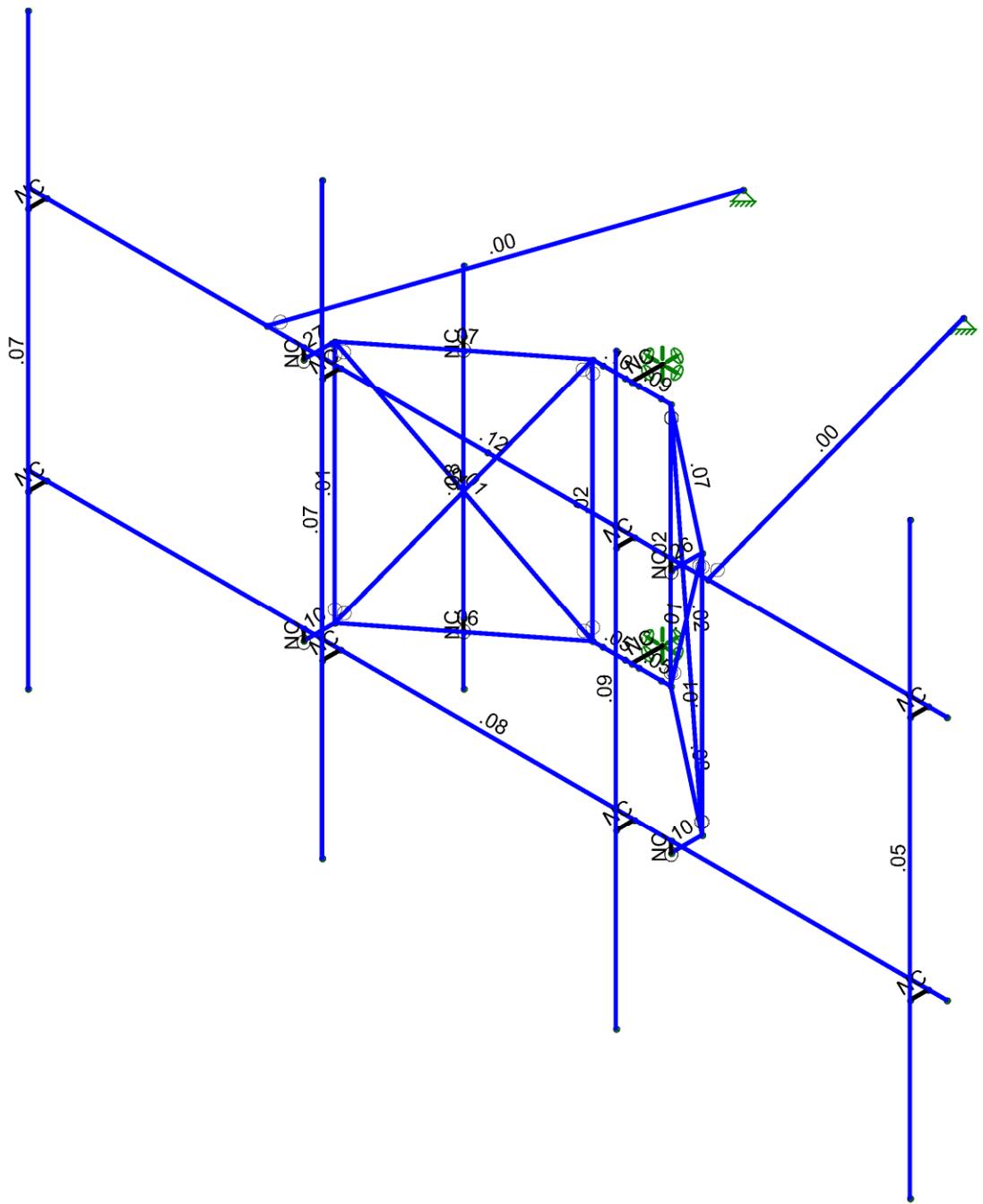
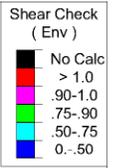
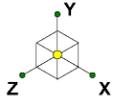
Mount Analysis-R

SK - 1

Nov 15, 2021 at 6:38 AM

VFA12-HD.r3d





Member Shear Checks Displayed (Enveloped)  
Envelope Only Solution

Maser Consulting	Mount Analysis-R	SK - 3
NL		Nov 15, 2021 at 6:39 AM
21781146A		VFA12-HD.r3d

**Basic Load Cases**

	BLC Description	Category	X Grav...	Y Grav...	Z Grav...	Joint	Point	Distrib...	Area(M..Surfac...
1	Antenna D	None					33		
2	Antenna Di	None					33		
3	Antenna Wo (0 Deg)	None					33		
4	Antenna Wo (30 Deg)	None					33		
5	Antenna Wo (60 Deg)	None					33		
6	Antenna Wo (90 Deg)	None					33		
7	Antenna Wo (120 Deg)	None					33		
8	Antenna Wo (150 Deg)	None					33		
9	Antenna Wo (180 Deg)	None					33		
10	Antenna Wo (210 Deg)	None					33		
11	Antenna Wo (240 Deg)	None					33		
12	Antenna Wo (270 Deg)	None					33		
13	Antenna Wo (300 Deg)	None					33		
14	Antenna Wo (330 Deg)	None					33		
15	Antenna Wi (0 Deg)	None					33		
16	Antenna Wi (30 Deg)	None					33		
17	Antenna Wi (60 Deg)	None					33		
18	Antenna Wi (90 Deg)	None					33		
19	Antenna Wi (120 Deg)	None					33		
20	Antenna Wi (150 Deg)	None					33		
21	Antenna Wi (180 Deg)	None					33		
22	Antenna Wi (210 Deg)	None					33		
23	Antenna Wi (240 Deg)	None					33		
24	Antenna Wi (270 Deg)	None					33		
25	Antenna Wi (300 Deg)	None					33		
26	Antenna Wi (330 Deg)	None					33		
27	Antenna Wm (0 Deg)	None					33		
28	Antenna Wm (30 Deg)	None					33		
29	Antenna Wm (60 Deg)	None					33		
30	Antenna Wm (90 Deg)	None					33		
31	Antenna Wm (120 Deg)	None					33		
32	Antenna Wm (150 Deg)	None					33		
33	Antenna Wm (180 Deg)	None					33		
34	Antenna Wm (210 Deg)	None					33		
35	Antenna Wm (240 Deg)	None					33		
36	Antenna Wm (270 Deg)	None					33		
37	Antenna Wm (300 Deg)	None					33		
38	Antenna Wm (330 Deg)	None					33		
39	Structure D	None		-1					
40	Structure Di	None						29	
41	Structure Wo (0 Deg)	None						58	
42	Structure Wo (30 Deg)	None						58	
43	Structure Wo (60 Deg)	None						58	
44	Structure Wo (90 Deg)	None						58	
45	Structure Wo (120 Deg)	None						58	
46	Structure Wo (150 Deg)	None						58	
47	Structure Wo (180 Deg)	None						58	
48	Structure Wo (210 Deg)	None						58	
49	Structure Wo (240 Deg)	None						58	
50	Structure Wo (270 Deg)	None						58	
51	Structure Wo (300 Deg)	None						58	
52	Structure Wo (330 Deg)	None						58	
53	Structure Wi (0 Deg)	None						58	
54	Structure Wi (30 Deg)	None						58	
55	Structure Wi (60 Deg)	None						58	
56	Structure Wi (90 Deg)	None						58	

**Basic Load Cases (Continued)**

	BLC Description	Category	X Grav...	Y Grav...	Z Grav...	Joint	Point	Distrib...	Area(M..Surfac...
57	Structure Wi (120 Deg)	None						58	
58	Structure Wi (150 Deg)	None						58	
59	Structure Wi (180 Deg)	None						58	
60	Structure Wi (210 Deg)	None						58	
61	Structure Wi (240 Deg)	None						58	
62	Structure Wi (270 Deg)	None						58	
63	Structure Wi (300 Deg)	None						58	
64	Structure Wi (330 Deg)	None						58	
65	Structure Wm (0 Deg)	None						58	
66	Structure Wm (30 Deg)	None						58	
67	Structure Wm (60 Deg)	None						58	
68	Structure Wm (90 Deg)	None						58	
69	Structure Wm (120 Deg)	None						58	
70	Structure Wm (150 Deg)	None						58	
71	Structure Wm (180 Deg)	None						58	
72	Structure Wm (210 Deg)	None						58	
73	Structure Wm (240 Deg)	None						58	
74	Structure Wm (270 Deg)	None						58	
75	Structure Wm (300 Deg)	None						58	
76	Structure Wm (330 Deg)	None						58	
77	Lm1	None					1		
78	Lm2	None					1		
79	Lv1	None					1		
80	Lv2	None					1		
81	Antenna Ev	None					33		
82	Antenna Eh (0 Deg)	None					22		
83	Antenna Eh (90 Deg)	None					22		
84	Structure Ev	ELY			-042				
85	Structure Eh (0 Deg)	ELZ		-.105					
86	Structure Eh (90 Deg)	ELX			.105				

**Load Combinations**

	Description	Solve P...	S...	B...	Fa...	B...	Fa...	BLC Fa...	B...	Fa...										
1	1.2D+1.0Wo (0 Deg)	Yes	Y	1	1.2	39	1.2	3	1	41	1									
2	1.2D+1.0Wo (30 Deg)	Yes	Y	1	1.2	39	1.2	4	1	42	1									
3	1.2D+1.0Wo (60 Deg)	Yes	Y	1	1.2	39	1.2	5	1	43	1									
4	1.2D+1.0Wo (90 Deg)	Yes	Y	1	1.2	39	1.2	6	1	44	1									
5	1.2D+1.0Wo (120 Deg)	Yes	Y	1	1.2	39	1.2	7	1	45	1									
6	1.2D+1.0Wo (150 Deg)	Yes	Y	1	1.2	39	1.2	8	1	46	1									
7	1.2D+1.0Wo (180 Deg)	Yes	Y	1	1.2	39	1.2	9	1	47	1									
8	1.2D+1.0Wo (210 Deg)	Yes	Y	1	1.2	39	1.2	10	1	48	1									
9	1.2D+1.0Wo (240 Deg)	Yes	Y	1	1.2	39	1.2	11	1	49	1									
10	1.2D+1.0Wo (270 Deg)	Yes	Y	1	1.2	39	1.2	12	1	50	1									
11	1.2D+1.0Wo (300 Deg)	Yes	Y	1	1.2	39	1.2	13	1	51	1									
12	1.2D+1.0Wo (330 Deg)	Yes	Y	1	1.2	39	1.2	14	1	52	1									
13	1.2D + 1.0Di + 1.0Wi (0 ...	Yes	Y	1	1.2	39	1.2	2	1	40	1	15	1	53	1					
14	1.2D + 1.0Di + 1.0Wi (3...	Yes	Y	1	1.2	39	1.2	2	1	40	1	16	1	54	1					
15	1.2D + 1.0Di + 1.0Wi (6...	Yes	Y	1	1.2	39	1.2	2	1	40	1	17	1	55	1					
16	1.2D + 1.0Di + 1.0Wi (9...	Yes	Y	1	1.2	39	1.2	2	1	40	1	18	1	56	1					
17	1.2D + 1.0Di + 1.0Wi (1...	Yes	Y	1	1.2	39	1.2	2	1	40	1	19	1	57	1					
18	1.2D + 1.0Di + 1.0Wi (1...	Yes	Y	1	1.2	39	1.2	2	1	40	1	20	1	58	1					
19	1.2D + 1.0Di + 1.0Wi (1...	Yes	Y	1	1.2	39	1.2	2	1	40	1	21	1	59	1					
20	1.2D + 1.0Di + 1.0Wi (2...	Yes	Y	1	1.2	39	1.2	2	1	40	1	22	1	60	1					
21	1.2D + 1.0Di + 1.0Wi (2...	Yes	Y	1	1.2	39	1.2	2	1	40	1	23	1	61	1					
22	1.2D + 1.0Di + 1.0Wi (2...	Yes	Y	1	1.2	39	1.2	2	1	40	1	24	1	62	1					

**Load Combinations (Continued)**

	Description	Solve P...	S...	B...	Fa...	B...	Fa...	BLC	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
23	1.2D + 1.0Di + 1.0Wi (3...	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1							
24	1.2D + 1.0Di + 1.0Wi (3...	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1							
25	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1									
26	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1									
27	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1									
28	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1									
29	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1									
30	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1									
31	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1									
32	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1									
33	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1									
34	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1									
35	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1									
36	1.2D + 1.5Lm1 + 1.0W...	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1									
37	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1									
38	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1									
39	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1									
40	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1									
41	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1									
42	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1									
43	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1									
44	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1									
45	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1									
46	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1									
47	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1									
48	1.2D + 1.5Lm2 + 1.0W...	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1									
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5													
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5													
51	1.4D	Yes	Y		1	1.4	39	1.4															
52	1.2D + 1.0Ev + 1.0Eh (0...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	1	83		ELZ	1	E...				
53	1.2D + 1.0Ev + 1.0Eh (3...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	.5	ELZ	.866	E...	.5			
54	1.2D + 1.0Ev + 1.0Eh (6...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	.866	ELZ	.5	E...	.866			
55	1.2D + 1.0Ev + 1.0Eh (9...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	1	ELZ		E...	1			
56	1.2D + 1.0Ev + 1.0Eh (1...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	.866	ELZ	-.5	E...	.866			
57	1.2D + 1.0Ev + 1.0Eh (1...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.866	83	.5	ELZ	-.866	E...	.5			
58	1.2D + 1.0Ev + 1.0Eh (1...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-1	83		ELZ	-1	E...				
59	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.866	83	-.5	ELZ	-.866	E...	-.5			
60	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	-.5	83	-.866	ELZ	-.5	E...	-.866			
61	1.2D + 1.0Ev + 1.0Eh (2...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82		83	-1	ELZ		E...	-1			
62	1.2D + 1.0Ev + 1.0Eh (3...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.5	83	-.866	ELZ	.5	E...	-.866			
63	1.2D + 1.0Ev + 1.0Eh (3...	Yes	Y		1	1.2	39	1.2	81	1	E...	1	82	.866	83	-.5	ELZ	.866	E...	-.5			
64	0.9D - 1.0Ev + 1.0Eh (0...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	1	83		ELZ	1	E...				
65	0.9D - 1.0Ev + 1.0Eh (3...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	.5	ELZ	.866	E...	.5			
66	0.9D - 1.0Ev + 1.0Eh (6...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	.866	ELZ	.5	E...	.866			
67	0.9D - 1.0Ev + 1.0Eh (9...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	1	ELZ		E...	1			
68	0.9D - 1.0Ev + 1.0Eh (1...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	.866	ELZ	-.5	E...	.866			
69	0.9D - 1.0Ev + 1.0Eh (1...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.866	83	.5	ELZ	-.866	E...	.5			
70	0.9D - 1.0Ev + 1.0Eh (1...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-1	83		ELZ	-1	E...				
71	0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.866	83	-.5	ELZ	-.866	E...	-.5			
72	0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	-.5	83	-.866	ELZ	-.5	E...	-.866			
73	0.9D - 1.0Ev + 1.0Eh (2...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82		83	-1	ELZ		E...	-1			
74	0.9D - 1.0Ev + 1.0Eh (3...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.5	83	-.866	ELZ	.5	E...	-.866			
75	0.9D - 1.0Ev + 1.0Eh (3...	Yes	Y		1	.9	39	.9	81	-1	E...	-1	82	.866	83	-.5	ELZ	.866	E...	-.5			

**Joint Coordinates and Temperatures**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	6.25	0.145833	8.083333	0	
2	N2	-6.25	0.145833	8.083333	0	
3	N3	6.25	3.479167	8.083333	0	
4	N4	-6.25	3.479167	8.083333	0	
5	N5	-6.	0.145833	8.083333	0	
6	N6	-6.	3.479167	8.083333	0	
7	N7	-2.	0.145833	8.083333	0	
8	N8	-2.	3.479167	8.083333	0	
9	N9	2.	0.145833	8.083333	0	
10	N10	2.	3.479167	8.083333	0	
11	N11	6.	0.145833	8.083333	0	
12	N12	6.	3.479167	8.083333	0	
13	N13	-6.	0.145833	8.333333	0	
14	N14	-6.	3.479167	8.333333	0	
15	N15	-2.	0.145833	8.333333	0	
16	N16	-2.	3.479167	8.333333	0	
17	N17	2.	0.145833	8.333333	0	
18	N18	2.	3.479167	8.333333	0	
19	N19	6.	0.145833	8.333333	0	
20	N20	6.	3.479167	8.333333	0	
21	N21	-2.5	0	8.083333	0	
22	N22	-2.5	3.333333	8.083333	0	
23	N23	2.5	0	8.083333	0	
24	N24	2.5	3.333333	8.083333	0	
25	N25	-2.5	0	7.661458	0	
26	N26	-2.5	3.333333	7.661458	0	
27	N27	2.5	0	7.661458	0	
28	N28	2.5	3.333333	7.661458	0	
29	N29	-0.	0	6.119792	0	
30	N30	-0.	3.333333	6.119792	0	
31	N31	-0.53125	0	6.119792	0	
32	N32	-0.53125	3.333333	6.119792	0	
33	N33	0.53125	0	6.119792	0	
34	N34	0.53125	3.333333	6.119792	0	
35	N35	-0.	0	5.703125	0	
36	N36	-0.	3.333333	5.703125	0	
37	N39	-6.	5.8125	8.333333	0	
38	N40	-2.	5.8125	8.333333	0	
39	N41	2.	5.8125	8.333333	0	
40	N42	6.	5.8125	8.333333	0	
41	N43	-6.	-2.1875	8.333333	0	
42	N44	-2.	-2.1875	8.333333	0	
43	N45	2.	-2.1875	8.333333	0	
44	N46	6.	-2.1875	8.333333	0	
45	N58	-2.5	3.333333	7.708333	0	
46	N76	-0.09375	0	6.119792	0	
47	N77	-0.395834	0	6.119792	0	
48	N78	0.09375	0	6.119792	0	
49	N79	0.395833	0	6.119792	0	
50	N80	-0.09375	3.333333	6.119792	0	
51	N81	-0.395834	3.333333	6.119792	0	
52	N82	0.09375	3.333333	6.119792	0	
53	N83	0.395833	3.333333	6.119792	0	
54	N58A	-0.	3.479167	8.083333	0	
55	N59	-2.5	0.145833	8.083333	0	
56	N60	-2.5	3.479167	8.083333	0	

**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
57	N61	2.5	0.145833	8.083333	0	
58	N62	2.5	3.479167	8.083333	0	
59	N60A	3.	3.479167	8.083333	0	
60	N61A	1.5	3.333333	3.105049	0	
61	N61B	-3.	3.479167	8.083333	0	
62	N62A	-1.5	3.333333	3.105049	0	
63	N63	-1.515625	3.333333	6.890625	0	
64	N64	-1.515625	0	6.890625	0	
65	N65	-1.682292	3.333333	6.723958	0	
66	N66	-1.682292	0	6.723958	0	
67	N67	-1.682292	4.166667	6.723958	0	
68	N68	-1.682292	-0.833333	6.723958	0	

**Hot Rolled Steel Section Sets**

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE_2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Horizontal mount ...	PIPE_2.5	Beam	Pipe	Q235	Typical	1.61	1.45	1.45	2.89
3	Standoff Horizontal	PIPE_2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
4	Standoff Diagonal	SR_0.75	Beam	BAR	Q235	Typical	.442	.016	.016	.031
5	Tieback	PIPE_2.0	Beam	Pipe	Q235	Typical	1.02	.627	.627	1.25
6	Standoff Vertical	SR_0.625	Beam	BAR	Q235	Typical	.307	.007	.007	.015
7	Standoff Plate	PL5/8X3.5	Beam	BAR	Q235	Typical	2.188	.071	2.233	.253
8	tower pipe	PIPE_3.0	Column	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69

**Hot Rolled Steel Properties**

	Label	E [ksi]	G [ksi]	Nu	Therm (/1...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
2	A53 Gr. B	29000	11154	.3	.65	.49	35	1.5	60	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
5	A500 Gr. B 42	29000	11154	.3	.65	.49	42	1.4	58	1.3
6	A500 Gr. B 46	29000	11154	.3	.65	.49	46	1.4	58	1.3
7	Q235	29000	11154	.3	.65	.49	35	1.5	58	1.2

**Member Primary Data**

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N1			Horizontal mou...	Beam	Pipe	Q235	Typical
2	M2	N4	N3			Horizontal mou...	Beam	Pipe	Q235	Typical
3	M3	N5	N13			RIGID	None	None	RIGID	Typical
4	M4	N6	N14			RIGID	None	None	RIGID	Typical
5	M5	N8	N16			RIGID	None	None	RIGID	Typical
6	M6	N7	N15			RIGID	None	None	RIGID	Typical
7	M9	N10	N18			RIGID	None	None	RIGID	Typical
8	M10	N9	N17			RIGID	None	None	RIGID	Typical
9	M11	N12	N20			RIGID	None	None	RIGID	Typical
10	M12	N11	N19			RIGID	None	None	RIGID	Typical
11	M13	N22	N26		90	Standoff Plate	Beam	BAR	Q235	Typical
12	M14	N21	N25		90	Standoff Plate	Beam	BAR	Q235	Typical
13	M15	N23	N27		90	Standoff Plate	Beam	BAR	Q235	Typical
14	M16	N24	N28		90	Standoff Plate	Beam	BAR	Q235	Typical
15	OVP	N26	N32			Standoff Horiz...	Beam	Pipe	Q235	Typical
16	M18	N25	N31			Standoff Horiz...	Beam	Pipe	Q235	Typical

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
17	M19	N27	N33			Standoff Horiz...	Beam	Pipe	Q235	Typical
18	M20	N28	N34			Standoff Horiz...	Beam	Pipe	Q235	Typical
19	M21	N32	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
20	M22	N34	N30		90	Standoff Plate	Beam	BAR	Q235	Typical
21	M23	N31	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
22	M24	N33	N29		90	Standoff Plate	Beam	BAR	Q235	Typical
23	M25	N31	N26			Standoff Diago...	Beam	BAR	Q235	Typical
24	M26	N32	N25			Standoff Diago...	Beam	BAR	Q235	Typical
25	M27	N33	N28			Standoff Diago...	Beam	BAR	Q235	Typical
26	M28	N27	N34			Standoff Diago...	Beam	BAR	Q235	Typical
27	M29	N29	N35			RIGID	None	None	RIGID	Typical
28	M30	N30	N36			RIGID	None	None	RIGID	Typical
29	MP4A	N39	N43			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
30	MP3A	N40	N44			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
31	MP2A	N41	N45			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
32	MP1A	N42	N46			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
33	M44	N25	N26			Standoff Vertical	Beam	BAR	Q235	Typical
34	M45	N31	N32			Standoff Vertical	Beam	BAR	Q235	Typical
35	M46	N33	N34			Standoff Vertical	Beam	BAR	Q235	Typical
36	M47	N27	N28			Standoff Vertical	Beam	BAR	Q235	Typical
37	M47B	N22	N60			RIGID	None	None	RIGID	Typical
38	M48A	N21	N59			RIGID	None	None	RIGID	Typical
39	M49A	N24	N62			RIGID	None	None	RIGID	Typical
40	M50A	N23	N61			RIGID	None	None	RIGID	Typical
41	M51A	N30	N36			RIGID	None	None	RIGID	Typical
42	M52A	N29	N35			RIGID	None	None	RIGID	Typical
43	M44A	N60A	N61A			Tieback	Beam	Pipe	Q235	Typical
44	M44B	N61B	N62A			Tieback	Beam	Pipe	Q235	Typical
45	OVP1	N67	N68			Antenna Pipe	Beam	Pipe	A53 Gr. B	Typical
46	M46A	N63	N65			RIGID	None	None	RIGID	Typical
47	M47A	N64	N66			RIGID	None	None	RIGID	Typical

**Member Advanced Data**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M2						Yes				None
3	M3						Yes	** NA **			None
4	M4						Yes	** NA **			None
5	M5						Yes	** NA **			None
6	M6						Yes	** NA **			None
7	M9						Yes	** NA **			None
8	M10						Yes	** NA **			None
9	M11						Yes	** NA **			None
10	M12						Yes	** NA **			None
11	M13						Yes	Default			None
12	M14						Yes	Default			None
13	M15						Yes				None
14	M16						Yes				None
15	OVP						Yes	Default			None
16	M18						Yes				None
17	M19						Yes				None
18	M20						Yes	Default			None
19	M21						Yes	Default			None
20	M22						Yes				None
21	M23						Yes				None

**Member Advanced Data (Continued)**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
22	M24						Yes				None
23	M25	BenPIN	BenPIN			Euler Buc...	Yes	Default			None
24	M26	BenPIN	BenPIN			Euler Buc...	Yes	Default			None
25	M27	BenPIN	BenPIN			Euler Buc...	Yes				None
26	M28	BenPIN	BenPIN			Euler Buc...	Yes				None
27	M29						Yes	** NA **		Inactive	None
28	M30						Yes	** NA **		Inactive	None
29	MP4A						Yes				None
30	MP3A						Yes				None
31	MP2A						Yes				None
32	MP1A						Yes				None
33	M44	BenPIN	BenPIN				Yes				None
34	M45	BenPIN	BenPIN				Yes				None
35	M46	BenPIN	BenPIN				Yes				None
36	M47	BenPIN	BenPIN				Yes	Default			None
37	M47B		OOOXOO				Yes	** NA **			None
38	M48A		OOOXOO				Yes	** NA **			None
39	M49A		OOOXOO				Yes	** NA **			None
40	M50A		OOOXOO				Yes	** NA **			None
41	M51A						Yes	** NA **			None
42	M52A						Yes	** NA **			None
43	M44A	BenPIN					Yes	Default			None
44	M44B	BenPIN					Yes	Default			None
45	OVP1						Yes				None
46	M46A		OOOXOO				Yes	** NA **			None
47	M47A		OOOXOO				Yes	** NA **			None

**Member Point Loads (BLC 1 : Antenna D)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	-15	2
2	MP4A	My	-.007	2
3	MP4A	Mz	0	2
4	MP4A	Y	-15	4.75
5	MP4A	My	-.007	4.75
6	MP4A	Mz	0	4.75
7	MP2A	Y	-21.85	.88
8	MP2A	My	-.011	.88
9	MP2A	Mz	.013	.88
10	MP2A	Y	-21.85	5.88
11	MP2A	My	-.011	5.88
12	MP2A	Mz	.013	5.88
13	MP2A	Y	-21.85	.88
14	MP2A	My	-.011	.88
15	MP2A	Mz	-.013	.88
16	MP2A	Y	-21.85	5.88
17	MP2A	My	-.011	5.88
18	MP2A	Mz	-.013	5.88
19	MP1A	Y	-43.55	2.38
20	MP1A	My	-.022	2.38
21	MP1A	Mz	0	2.38
22	MP1A	Y	-43.55	4.38
23	MP1A	My	-.022	4.38
24	MP1A	Mz	0	4.38
25	MP3A	Y	-74.7	2
26	MP3A	My	.025	2

**Member Point Loads (BLC 1 : Antenna D) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP3A	Mz	0	2
28	MP2A	Y	-70.3	2
29	MP2A	My	.023	2
30	MP2A	Mz	0	2
31	OVP1	Y	-32	2.5
32	OVP1	My	-.009	2.5
33	OVP1	Mz	-.005	2.5

**Member Point Loads (BLC 2 : Antenna Di)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	-85.558	2
2	MP4A	My	-.043	2
3	MP4A	Mz	0	2
4	MP4A	Y	-85.558	4.75
5	MP4A	My	-.043	4.75
6	MP4A	Mz	0	4.75
7	MP2A	Y	-60.411	.88
8	MP2A	My	-.03	.88
9	MP2A	Mz	.035	.88
10	MP2A	Y	-60.411	5.88
11	MP2A	My	-.03	5.88
12	MP2A	Mz	.035	5.88
13	MP2A	Y	-60.411	.88
14	MP2A	My	-.03	.88
15	MP2A	Mz	-.035	.88
16	MP2A	Y	-60.411	5.88
17	MP2A	My	-.03	5.88
18	MP2A	Mz	-.035	5.88
19	MP1A	Y	-35.505	2.38
20	MP1A	My	-.018	2.38
21	MP1A	Mz	0	2.38
22	MP1A	Y	-35.505	4.38
23	MP1A	My	-.018	4.38
24	MP1A	Mz	0	4.38
25	MP3A	Y	-44.762	2
26	MP3A	My	.015	2
27	MP3A	Mz	0	2
28	MP2A	Y	-42.626	2
29	MP2A	My	.014	2
30	MP2A	Mz	0	2
31	OVP1	Y	-87.651	2.5
32	OVP1	My	-.025	2.5
33	OVP1	Mz	-.015	2.5

**Member Point Loads (BLC 3 : Antenna Wo (0 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	2
2	MP4A	Z	-198.12	2
3	MP4A	Mx	0	2
4	MP4A	X	0	4.75
5	MP4A	Z	-198.12	4.75
6	MP4A	Mx	0	4.75
7	MP2A	X	0	.88
8	MP2A	Z	-160.724	.88
9	MP2A	Mx	-.094	.88
10	MP2A	X	0	5.88

**Member Point Loads (BLC 3 : Antenna Wo (0 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
11	MP2A	Z	-160.724	5.88
12	MP2A	Mx	-.094	5.88
13	MP2A	X	0	.88
14	MP2A	Z	-160.724	.88
15	MP2A	Mx	.094	.88
16	MP2A	X	0	5.88
17	MP2A	Z	-160.724	5.88
18	MP2A	Mx	.094	5.88
19	MP1A	X	0	2.38
20	MP1A	Z	-93.49	2.38
21	MP1A	Mx	0	2.38
22	MP1A	X	0	4.38
23	MP1A	Z	-93.49	4.38
24	MP1A	Mx	0	4.38
25	MP3A	X	0	2
26	MP3A	Z	-74.394	2
27	MP3A	Mx	0	2
28	MP2A	X	0	2
29	MP2A	Z	-74.394	2
30	MP2A	Mx	0	2
31	OVP1	X	0	2.5
32	OVP1	Z	-132.801	2.5
33	OVP1	Mx	.022	2.5

**Member Point Loads (BLC 4 : Antenna Wo (30 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	95.204	2
2	MP4A	Z	-164.899	2
3	MP4A	Mx	-.048	2
4	MP4A	X	95.204	4.75
5	MP4A	Z	-164.899	4.75
6	MP4A	Mx	-.048	4.75
7	MP2A	X	73.553	.88
8	MP2A	Z	-127.398	.88
9	MP2A	Mx	-.111	.88
10	MP2A	X	73.553	5.88
11	MP2A	Z	-127.398	5.88
12	MP2A	Mx	-.111	5.88
13	MP2A	X	73.553	.88
14	MP2A	Z	-127.398	.88
15	MP2A	Mx	.038	.88
16	MP2A	X	73.553	5.88
17	MP2A	Z	-127.398	5.88
18	MP2A	Mx	.038	5.88
19	MP1A	X	39.634	2.38
20	MP1A	Z	-68.648	2.38
21	MP1A	Mx	-.02	2.38
22	MP1A	X	39.634	4.38
23	MP1A	Z	-68.648	4.38
24	MP1A	Mx	-.02	4.38
25	MP3A	X	34.114	2
26	MP3A	Z	-59.087	2
27	MP3A	Mx	.011	2
28	MP2A	X	33.555	2
29	MP2A	Z	-58.118	2
30	MP2A	Mx	.011	2

**Member Point Loads (BLC 4 : Antenna Wo (30 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
31	OVP1	X	61.614	2.5
32	OVP1	Z	-106.719	2.5
33	OVP1	Mx	0	2.5

**Member Point Loads (BLC 5 : Antenna Wo (60 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	151.543	2
2	MP4A	Z	-87.493	2
3	MP4A	Mx	-.076	2
4	MP4A	X	151.543	4.75
5	MP4A	Z	-87.493	4.75
6	MP4A	Mx	-.076	4.75
7	MP2A	X	103.812	.88
8	MP2A	Z	-59.936	.88
9	MP2A	Mx	-.087	.88
10	MP2A	X	103.812	5.88
11	MP2A	Z	-59.936	5.88
12	MP2A	Mx	-.087	5.88
13	MP2A	X	103.812	.88
14	MP2A	Z	-59.936	.88
15	MP2A	Mx	-.017	.88
16	MP2A	X	103.812	5.88
17	MP2A	Z	-59.936	5.88
18	MP2A	Mx	-.017	5.88
19	MP1A	X	44.014	2.38
20	MP1A	Z	-25.412	2.38
21	MP1A	Mx	-.022	2.38
22	MP1A	X	44.014	4.38
23	MP1A	Z	-25.412	4.38
24	MP1A	Mx	-.022	4.38
25	MP3A	X	48.407	2
26	MP3A	Z	-27.948	2
27	MP3A	Mx	.016	2
28	MP2A	X	45.5	2
29	MP2A	Z	-26.269	2
30	MP2A	Mx	.015	2
31	OVP1	X	115.009	2.5
32	OVP1	Z	-66.4	2.5
33	OVP1	Mx	-.022	2.5

**Member Point Loads (BLC 6 : Antenna Wo (90 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	167.276	2
2	MP4A	Z	0	2
3	MP4A	Mx	-.084	2
4	MP4A	X	167.276	4.75
5	MP4A	Z	0	4.75
6	MP4A	Mx	-.084	4.75
7	MP2A	X	106.254	.88
8	MP2A	Z	0	.88
9	MP2A	Mx	-.053	.88
10	MP2A	X	106.254	5.88
11	MP2A	Z	0	5.88
12	MP2A	Mx	-.053	5.88
13	MP2A	X	106.254	.88
14	MP2A	Z	0	.88

**Member Point Loads (BLC 6 : Antenna Wo (90 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP2A	Mx	-.053	.88
16	MP2A	X	106.254	5.88
17	MP2A	Z	0	5.88
18	MP2A	Mx	-.053	5.88
19	MP1A	X	36.601	2.38
20	MP1A	Z	0	2.38
21	MP1A	Mx	-.018	2.38
22	MP1A	X	36.601	4.38
23	MP1A	Z	0	4.38
24	MP1A	Mx	-.018	4.38
25	MP3A	X	49.729	2
26	MP3A	Z	0	2
27	MP3A	Mx	.017	2
28	MP2A	X	45.253	2
29	MP2A	Z	0	2
30	MP2A	Mx	.015	2
31	OVP1	X	151.947	2.5
32	OVP1	Z	0	2.5
33	OVP1	Mx	-.044	2.5

**Member Point Loads (BLC 7 : Antenna Wo (120 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	151.543	2
2	MP4A	Z	87.493	2
3	MP4A	Mx	-.076	2
4	MP4A	X	151.543	4.75
5	MP4A	Z	87.493	4.75
6	MP4A	Mx	-.076	4.75
7	MP2A	X	103.812	.88
8	MP2A	Z	59.936	.88
9	MP2A	Mx	-.017	.88
10	MP2A	X	103.812	5.88
11	MP2A	Z	59.936	5.88
12	MP2A	Mx	-.017	5.88
13	MP2A	X	103.812	.88
14	MP2A	Z	59.936	.88
15	MP2A	Mx	-.087	.88
16	MP2A	X	103.812	5.88
17	MP2A	Z	59.936	5.88
18	MP2A	Mx	-.087	5.88
19	MP1A	X	44.014	2.38
20	MP1A	Z	25.412	2.38
21	MP1A	Mx	-.022	2.38
22	MP1A	X	44.014	4.38
23	MP1A	Z	25.412	4.38
24	MP1A	Mx	-.022	4.38
25	MP3A	X	48.407	2
26	MP3A	Z	27.948	2
27	MP3A	Mx	.016	2
28	MP2A	X	45.5	2
29	MP2A	Z	26.269	2
30	MP2A	Mx	.015	2
31	OVP1	X	139.88	2.5
32	OVP1	Z	80.76	2.5
33	OVP1	Mx	-.054	2.5

**Member Point Loads (BLC 8 : Antenna Wo (150 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	95.204	2
2	MP4A	Z	164.899	2
3	MP4A	Mx	-.048	2
4	MP4A	X	95.204	4.75
5	MP4A	Z	164.899	4.75
6	MP4A	Mx	-.048	4.75
7	MP2A	X	73.553	.88
8	MP2A	Z	127.398	.88
9	MP2A	Mx	.038	.88
10	MP2A	X	73.553	5.88
11	MP2A	Z	127.398	5.88
12	MP2A	Mx	.038	5.88
13	MP2A	X	73.553	.88
14	MP2A	Z	127.398	.88
15	MP2A	Mx	-.111	.88
16	MP2A	X	73.553	5.88
17	MP2A	Z	127.398	5.88
18	MP2A	Mx	-.111	5.88
19	MP1A	X	39.634	2.38
20	MP1A	Z	68.648	2.38
21	MP1A	Mx	-.02	2.38
22	MP1A	X	39.634	4.38
23	MP1A	Z	68.648	4.38
24	MP1A	Mx	-.02	4.38
25	MP3A	X	34.114	2
26	MP3A	Z	59.087	2
27	MP3A	Mx	.011	2
28	MP2A	X	33.555	2
29	MP2A	Z	58.118	2
30	MP2A	Mx	.011	2
31	OVP1	X	75.973	2.5
32	OVP1	Z	131.59	2.5
33	OVP1	Mx	-.044	2.5

**Member Point Loads (BLC 9 : Antenna Wo (180 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	2
2	MP4A	Z	198.12	2
3	MP4A	Mx	0	2
4	MP4A	X	0	4.75
5	MP4A	Z	198.12	4.75
6	MP4A	Mx	0	4.75
7	MP2A	X	0	.88
8	MP2A	Z	160.724	.88
9	MP2A	Mx	.094	.88
10	MP2A	X	0	5.88
11	MP2A	Z	160.724	5.88
12	MP2A	Mx	.094	5.88
13	MP2A	X	0	.88
14	MP2A	Z	160.724	.88
15	MP2A	Mx	-.094	.88
16	MP2A	X	0	5.88
17	MP2A	Z	160.724	5.88
18	MP2A	Mx	-.094	5.88
19	MP1A	X	0	2.38
20	MP1A	Z	93.49	2.38

**Member Point Loads (BLC 9 : Antenna Wo (180 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
21	MP1A	Mx	0	2.38
22	MP1A	X	0	4.38
23	MP1A	Z	93.49	4.38
24	MP1A	Mx	0	4.38
25	MP3A	X	0	2
26	MP3A	Z	74.394	2
27	MP3A	Mx	0	2
28	MP2A	X	0	2
29	MP2A	Z	74.394	2
30	MP2A	Mx	0	2
31	OVP1	X	0	2.5
32	OVP1	Z	132.801	2.5
33	OVP1	Mx	-.022	2.5

**Member Point Loads (BLC 10 : Antenna Wo (210 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-95.204	2
2	MP4A	Z	164.899	2
3	MP4A	Mx	.048	2
4	MP4A	X	-95.204	4.75
5	MP4A	Z	164.899	4.75
6	MP4A	Mx	.048	4.75
7	MP2A	X	-73.553	.88
8	MP2A	Z	127.398	.88
9	MP2A	Mx	.111	.88
10	MP2A	X	-73.553	5.88
11	MP2A	Z	127.398	5.88
12	MP2A	Mx	.111	5.88
13	MP2A	X	-73.553	.88
14	MP2A	Z	127.398	.88
15	MP2A	Mx	-.038	.88
16	MP2A	X	-73.553	5.88
17	MP2A	Z	127.398	5.88
18	MP2A	Mx	-.038	5.88
19	MP1A	X	-39.634	2.38
20	MP1A	Z	68.648	2.38
21	MP1A	Mx	.02	2.38
22	MP1A	X	-39.634	4.38
23	MP1A	Z	68.648	4.38
24	MP1A	Mx	.02	4.38
25	MP3A	X	-34.114	2
26	MP3A	Z	59.087	2
27	MP3A	Mx	-.011	2
28	MP2A	X	-33.555	2
29	MP2A	Z	58.118	2
30	MP2A	Mx	-.011	2
31	OVP1	X	-61.614	2.5
32	OVP1	Z	106.719	2.5
33	OVP1	Mx	0	2.5

**Member Point Loads (BLC 11 : Antenna Wo (240 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-151.543	2
2	MP4A	Z	87.493	2
3	MP4A	Mx	.076	2
4	MP4A	X	-151.543	4.75

**Member Point Loads (BLC 11 : Antenna Wo (240 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4A	Z	87.493	4.75
6	MP4A	Mx	.076	4.75
7	MP2A	X	-103.812	.88
8	MP2A	Z	59.936	.88
9	MP2A	Mx	.087	.88
10	MP2A	X	-103.812	5.88
11	MP2A	Z	59.936	5.88
12	MP2A	Mx	.087	5.88
13	MP2A	X	-103.812	.88
14	MP2A	Z	59.936	.88
15	MP2A	Mx	.017	.88
16	MP2A	X	-103.812	5.88
17	MP2A	Z	59.936	5.88
18	MP2A	Mx	.017	5.88
19	MP1A	X	-44.014	2.38
20	MP1A	Z	25.412	2.38
21	MP1A	Mx	.022	2.38
22	MP1A	X	-44.014	4.38
23	MP1A	Z	25.412	4.38
24	MP1A	Mx	.022	4.38
25	MP3A	X	-48.407	2
26	MP3A	Z	27.948	2
27	MP3A	Mx	-.016	2
28	MP2A	X	-45.5	2
29	MP2A	Z	26.269	2
30	MP2A	Mx	-.015	2
31	OVP1	X	-115.009	2.5
32	OVP1	Z	66.4	2.5
33	OVP1	Mx	.022	2.5

**Member Point Loads (BLC 12 : Antenna Wo (270 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-167.276	2
2	MP4A	Z	0	2
3	MP4A	Mx	.084	2
4	MP4A	X	-167.276	4.75
5	MP4A	Z	0	4.75
6	MP4A	Mx	.084	4.75
7	MP2A	X	-106.254	.88
8	MP2A	Z	0	.88
9	MP2A	Mx	.053	.88
10	MP2A	X	-106.254	5.88
11	MP2A	Z	0	5.88
12	MP2A	Mx	.053	5.88
13	MP2A	X	-106.254	.88
14	MP2A	Z	0	.88
15	MP2A	Mx	.053	.88
16	MP2A	X	-106.254	5.88
17	MP2A	Z	0	5.88
18	MP2A	Mx	.053	5.88
19	MP1A	X	-36.601	2.38
20	MP1A	Z	0	2.38
21	MP1A	Mx	.018	2.38
22	MP1A	X	-36.601	4.38
23	MP1A	Z	0	4.38
24	MP1A	Mx	.018	4.38

**Member Point Loads (BLC 12 : Antenna Wo (270 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP3A	X	-49.729	2
26	MP3A	Z	0	2
27	MP3A	Mx	-.017	2
28	MP2A	X	-45.253	2
29	MP2A	Z	0	2
30	MP2A	Mx	-.015	2
31	OVP1	X	-151.947	2.5
32	OVP1	Z	0	2.5
33	OVP1	Mx	.044	2.5

**Member Point Loads (BLC 13 : Antenna Wo (300 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-151.543	2
2	MP4A	Z	-87.493	2
3	MP4A	Mx	.076	2
4	MP4A	X	-151.543	4.75
5	MP4A	Z	-87.493	4.75
6	MP4A	Mx	.076	4.75
7	MP2A	X	-103.812	.88
8	MP2A	Z	-59.936	.88
9	MP2A	Mx	.017	.88
10	MP2A	X	-103.812	5.88
11	MP2A	Z	-59.936	5.88
12	MP2A	Mx	.017	5.88
13	MP2A	X	-103.812	.88
14	MP2A	Z	-59.936	.88
15	MP2A	Mx	.087	.88
16	MP2A	X	-103.812	5.88
17	MP2A	Z	-59.936	5.88
18	MP2A	Mx	.087	5.88
19	MP1A	X	-44.014	2.38
20	MP1A	Z	-25.412	2.38
21	MP1A	Mx	.022	2.38
22	MP1A	X	-44.014	4.38
23	MP1A	Z	-25.412	4.38
24	MP1A	Mx	.022	4.38
25	MP3A	X	-48.407	2
26	MP3A	Z	-27.948	2
27	MP3A	Mx	-.016	2
28	MP2A	X	-45.5	2
29	MP2A	Z	-26.269	2
30	MP2A	Mx	-.015	2
31	OVP1	X	-139.88	2.5
32	OVP1	Z	-80.76	2.5
33	OVP1	Mx	.054	2.5

**Member Point Loads (BLC 14 : Antenna Wo (330 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-95.204	2
2	MP4A	Z	-164.899	2
3	MP4A	Mx	.048	2
4	MP4A	X	-95.204	4.75
5	MP4A	Z	-164.899	4.75
6	MP4A	Mx	.048	4.75
7	MP2A	X	-73.553	.88
8	MP2A	Z	-127.398	.88

**Member Point Loads (BLC 14 : Antenna Wo (330 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2A	Mx	-.038	.88
10	MP2A	X	-73.553	5.88
11	MP2A	Z	-127.398	5.88
12	MP2A	Mx	-.038	5.88
13	MP2A	X	-73.553	.88
14	MP2A	Z	-127.398	.88
15	MP2A	Mx	.111	.88
16	MP2A	X	-73.553	5.88
17	MP2A	Z	-127.398	5.88
18	MP2A	Mx	.111	5.88
19	MP1A	X	-39.634	2.38
20	MP1A	Z	-68.648	2.38
21	MP1A	Mx	.02	2.38
22	MP1A	X	-39.634	4.38
23	MP1A	Z	-68.648	4.38
24	MP1A	Mx	.02	4.38
25	MP3A	X	-34.114	2
26	MP3A	Z	-59.087	2
27	MP3A	Mx	-.011	2
28	MP2A	X	-33.555	2
29	MP2A	Z	-58.118	2
30	MP2A	Mx	-.011	2
31	OVP1	X	-75.973	2.5
32	OVP1	Z	-131.59	2.5
33	OVP1	Mx	.044	2.5

**Member Point Loads (BLC 15 : Antenna Wi (0 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	2
2	MP4A	Z	-38.902	2
3	MP4A	Mx	0	2
4	MP4A	X	0	4.75
5	MP4A	Z	-38.902	4.75
6	MP4A	Mx	0	4.75
7	MP2A	X	0	.88
8	MP2A	Z	-31.824	.88
9	MP2A	Mx	-.019	.88
10	MP2A	X	0	5.88
11	MP2A	Z	-31.824	5.88
12	MP2A	Mx	-.019	5.88
13	MP2A	X	0	.88
14	MP2A	Z	-31.824	.88
15	MP2A	Mx	.019	.88
16	MP2A	X	0	5.88
17	MP2A	Z	-31.824	5.88
18	MP2A	Mx	.019	5.88
19	MP1A	X	0	2.38
20	MP1A	Z	-18.957	2.38
21	MP1A	Mx	0	2.38
22	MP1A	X	0	4.38
23	MP1A	Z	-18.957	4.38
24	MP1A	Mx	0	4.38
25	MP3A	X	0	2
26	MP3A	Z	-15.975	2
27	MP3A	Mx	0	2
28	MP2A	X	0	2

**Member Point Loads (BLC 15 : Antenna Wi (0 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	-15.975	2
30	MP2A	Mx	0	2
31	OVP1	X	0	2.5
32	OVP1	Z	-27.464	2.5
33	OVP1	Mx	.005	2.5

**Member Point Loads (BLC 16 : Antenna Wi (30 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	18.725	2
2	MP4A	Z	-32.432	2
3	MP4A	Mx	-.009	2
4	MP4A	X	18.725	4.75
5	MP4A	Z	-32.432	4.75
6	MP4A	Mx	-.009	4.75
7	MP2A	X	14.677	.88
8	MP2A	Z	-25.421	.88
9	MP2A	Mx	-.022	.88
10	MP2A	X	14.677	5.88
11	MP2A	Z	-25.421	5.88
12	MP2A	Mx	-.022	5.88
13	MP2A	X	14.677	.88
14	MP2A	Z	-25.421	.88
15	MP2A	Mx	.007	.88
16	MP2A	X	14.677	5.88
17	MP2A	Z	-25.421	5.88
18	MP2A	Mx	.007	5.88
19	MP1A	X	8.118	2.38
20	MP1A	Z	-14.061	2.38
21	MP1A	Mx	-.004	2.38
22	MP1A	X	8.118	4.38
23	MP1A	Z	-14.061	4.38
24	MP1A	Mx	-.004	4.38
25	MP3A	X	7.379	2
26	MP3A	Z	-12.781	2
27	MP3A	Mx	.002	2
28	MP2A	X	7.27	2
29	MP2A	Z	-12.592	2
30	MP2A	Mx	.002	2
31	OVP1	X	12.837	2.5
32	OVP1	Z	-22.234	2.5
33	OVP1	Mx	0	2.5

**Member Point Loads (BLC 17 : Antenna Wi (60 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	29.917	2
2	MP4A	Z	-17.273	2
3	MP4A	Mx	-.015	2
4	MP4A	X	29.917	4.75
5	MP4A	Z	-17.273	4.75
6	MP4A	Mx	-.015	4.75
7	MP2A	X	21.142	.88
8	MP2A	Z	-12.206	.88
9	MP2A	Mx	-.018	.88
10	MP2A	X	21.142	5.88
11	MP2A	Z	-12.206	5.88
12	MP2A	Mx	-.018	5.88

**Member Point Loads (BLC 17 : Antenna Wi (60 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP2A	X	21.142	.88
14	MP2A	Z	-12.206	.88
15	MP2A	Mx	-.003	.88
16	MP2A	X	21.142	5.88
17	MP2A	Z	-12.206	5.88
18	MP2A	Mx	-.003	5.88
19	MP1A	X	9.348	2.38
20	MP1A	Z	-5.397	2.38
21	MP1A	Mx	-.005	2.38
22	MP1A	X	9.348	4.38
23	MP1A	Z	-5.397	4.38
24	MP1A	Mx	-.005	4.38
25	MP3A	X	10.675	2
26	MP3A	Z	-6.163	2
27	MP3A	Mx	.004	2
28	MP2A	X	10.106	2
29	MP2A	Z	-5.835	2
30	MP2A	Mx	.003	2
31	OVP1	X	23.784	2.5
32	OVP1	Z	-13.732	2.5
33	OVP1	Mx	-.005	2.5

**Member Point Loads (BLC 18 : Antenna Wi (90 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	33.093	2
2	MP4A	Z	0	2
3	MP4A	Mx	-.017	2
4	MP4A	X	33.093	4.75
5	MP4A	Z	0	4.75
6	MP4A	Mx	-.017	4.75
7	MP2A	X	21.943	.88
8	MP2A	Z	0	.88
9	MP2A	Mx	-.011	.88
10	MP2A	X	21.943	5.88
11	MP2A	Z	0	5.88
12	MP2A	Mx	-.011	5.88
13	MP2A	X	21.943	.88
14	MP2A	Z	0	.88
15	MP2A	Mx	-.011	.88
16	MP2A	X	21.943	5.88
17	MP2A	Z	0	5.88
18	MP2A	Mx	-.011	5.88
19	MP1A	X	8.073	2.38
20	MP1A	Z	0	2.38
21	MP1A	Mx	-.004	2.38
22	MP1A	X	8.073	4.38
23	MP1A	Z	0	4.38
24	MP1A	Mx	-.004	4.38
25	MP3A	X	11.111	2
26	MP3A	Z	0	2
27	MP3A	Mx	.004	2
28	MP2A	X	10.235	2
29	MP2A	Z	0	2
30	MP2A	Mx	.003	2
31	OVP1	X	31.044	2.5
32	OVP1	Z	0	2.5

**Member Point Loads (BLC 18 : Antenna Wi (90 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	OVP1	Mx	-.009	2.5

**Member Point Loads (BLC 19 : Antenna Wi (120 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	29.917	2
2	MP4A	Z	17.273	2
3	MP4A	Mx	-.015	2
4	MP4A	X	29.917	4.75
5	MP4A	Z	17.273	4.75
6	MP4A	Mx	-.015	4.75
7	MP2A	X	21.142	.88
8	MP2A	Z	12.206	.88
9	MP2A	Mx	-.003	.88
10	MP2A	X	21.142	5.88
11	MP2A	Z	12.206	5.88
12	MP2A	Mx	-.003	5.88
13	MP2A	X	21.142	.88
14	MP2A	Z	12.206	.88
15	MP2A	Mx	-.018	.88
16	MP2A	X	21.142	5.88
17	MP2A	Z	12.206	5.88
18	MP2A	Mx	-.018	5.88
19	MP1A	X	9.348	2.38
20	MP1A	Z	5.397	2.38
21	MP1A	Mx	-.005	2.38
22	MP1A	X	9.348	4.38
23	MP1A	Z	5.397	4.38
24	MP1A	Mx	-.005	4.38
25	MP3A	X	10.675	2
26	MP3A	Z	6.163	2
27	MP3A	Mx	.004	2
28	MP2A	X	10.106	2
29	MP2A	Z	5.835	2
30	MP2A	Mx	.003	2
31	OVP1	X	28.435	2.5
32	OVP1	Z	16.417	2.5
33	OVP1	Mx	-.011	2.5

**Member Point Loads (BLC 20 : Antenna Wi (150 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	18.725	2
2	MP4A	Z	32.432	2
3	MP4A	Mx	-.009	2
4	MP4A	X	18.725	4.75
5	MP4A	Z	32.432	4.75
6	MP4A	Mx	-.009	4.75
7	MP2A	X	14.677	.88
8	MP2A	Z	25.421	.88
9	MP2A	Mx	.007	.88
10	MP2A	X	14.677	5.88
11	MP2A	Z	25.421	5.88
12	MP2A	Mx	.007	5.88
13	MP2A	X	14.677	.88
14	MP2A	Z	25.421	.88
15	MP2A	Mx	-.022	.88
16	MP2A	X	14.677	5.88

**Member Point Loads (BLC 20 : Antenna Wi (150 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2A	Z	25.421	5.88
18	MP2A	Mx	-.022	5.88
19	MP1A	X	8.118	2.38
20	MP1A	Z	14.061	2.38
21	MP1A	Mx	-.004	2.38
22	MP1A	X	8.118	4.38
23	MP1A	Z	14.061	4.38
24	MP1A	Mx	-.004	4.38
25	MP3A	X	7.379	2
26	MP3A	Z	12.781	2
27	MP3A	Mx	.002	2
28	MP2A	X	7.27	2
29	MP2A	Z	12.592	2
30	MP2A	Mx	.002	2
31	OVP1	X	15.522	2.5
32	OVP1	Z	26.885	2.5
33	OVP1	Mx	-.009	2.5

**Member Point Loads (BLC 21 : Antenna Wi (180 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	2
2	MP4A	Z	38.902	2
3	MP4A	Mx	0	2
4	MP4A	X	0	4.75
5	MP4A	Z	38.902	4.75
6	MP4A	Mx	0	4.75
7	MP2A	X	0	.88
8	MP2A	Z	31.824	.88
9	MP2A	Mx	.019	.88
10	MP2A	X	0	5.88
11	MP2A	Z	31.824	5.88
12	MP2A	Mx	.019	5.88
13	MP2A	X	0	.88
14	MP2A	Z	31.824	.88
15	MP2A	Mx	-.019	.88
16	MP2A	X	0	5.88
17	MP2A	Z	31.824	5.88
18	MP2A	Mx	-.019	5.88
19	MP1A	X	0	2.38
20	MP1A	Z	18.957	2.38
21	MP1A	Mx	0	2.38
22	MP1A	X	0	4.38
23	MP1A	Z	18.957	4.38
24	MP1A	Mx	0	4.38
25	MP3A	X	0	2
26	MP3A	Z	15.975	2
27	MP3A	Mx	0	2
28	MP2A	X	0	2
29	MP2A	Z	15.975	2
30	MP2A	Mx	0	2
31	OVP1	X	0	2.5
32	OVP1	Z	27.464	2.5
33	OVP1	Mx	-.005	2.5

**Member Point Loads (BLC 22 : Antenna Wi (210 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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**Member Point Loads (BLC 22 : Antenna Wi (210 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-18.725	2
2	MP4A	Z	32.432	2
3	MP4A	Mx	.009	2
4	MP4A	X	-18.725	4.75
5	MP4A	Z	32.432	4.75
6	MP4A	Mx	.009	4.75
7	MP2A	X	-14.677	.88
8	MP2A	Z	25.421	.88
9	MP2A	Mx	.022	.88
10	MP2A	X	-14.677	5.88
11	MP2A	Z	25.421	5.88
12	MP2A	Mx	.022	5.88
13	MP2A	X	-14.677	.88
14	MP2A	Z	25.421	.88
15	MP2A	Mx	-.007	.88
16	MP2A	X	-14.677	5.88
17	MP2A	Z	25.421	5.88
18	MP2A	Mx	-.007	5.88
19	MP1A	X	-8.118	2.38
20	MP1A	Z	14.061	2.38
21	MP1A	Mx	.004	2.38
22	MP1A	X	-8.118	4.38
23	MP1A	Z	14.061	4.38
24	MP1A	Mx	.004	4.38
25	MP3A	X	-7.379	2
26	MP3A	Z	12.781	2
27	MP3A	Mx	-.002	2
28	MP2A	X	-7.27	2
29	MP2A	Z	12.592	2
30	MP2A	Mx	-.002	2
31	OVP1	X	-12.837	2.5
32	OVP1	Z	22.234	2.5
33	OVP1	Mx	0	2.5

**Member Point Loads (BLC 23 : Antenna Wi (240 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-29.917	2
2	MP4A	Z	17.273	2
3	MP4A	Mx	.015	2
4	MP4A	X	-29.917	4.75
5	MP4A	Z	17.273	4.75
6	MP4A	Mx	.015	4.75
7	MP2A	X	-21.142	.88
8	MP2A	Z	12.206	.88
9	MP2A	Mx	.018	.88
10	MP2A	X	-21.142	5.88
11	MP2A	Z	12.206	5.88
12	MP2A	Mx	.018	5.88
13	MP2A	X	-21.142	.88
14	MP2A	Z	12.206	.88
15	MP2A	Mx	.003	.88
16	MP2A	X	-21.142	5.88
17	MP2A	Z	12.206	5.88
18	MP2A	Mx	.003	5.88
19	MP1A	X	-9.348	2.38
20	MP1A	Z	5.397	2.38

**Member Point Loads (BLC 23 : Antenna Wi (240 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
21	MP1A	Mx	.005	2.38
22	MP1A	X	-9.348	4.38
23	MP1A	Z	5.397	4.38
24	MP1A	Mx	.005	4.38
25	MP3A	X	-10.675	2
26	MP3A	Z	6.163	2
27	MP3A	Mx	-.004	2
28	MP2A	X	-10.106	2
29	MP2A	Z	5.835	2
30	MP2A	Mx	-.003	2
31	OVP1	X	-23.784	2.5
32	OVP1	Z	13.732	2.5
33	OVP1	Mx	.005	2.5

**Member Point Loads (BLC 24 : Antenna Wi (270 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-33.093	2
2	MP4A	Z	0	2
3	MP4A	Mx	.017	2
4	MP4A	X	-33.093	4.75
5	MP4A	Z	0	4.75
6	MP4A	Mx	.017	4.75
7	MP2A	X	-21.943	.88
8	MP2A	Z	0	.88
9	MP2A	Mx	.011	.88
10	MP2A	X	-21.943	5.88
11	MP2A	Z	0	5.88
12	MP2A	Mx	.011	5.88
13	MP2A	X	-21.943	.88
14	MP2A	Z	0	.88
15	MP2A	Mx	.011	.88
16	MP2A	X	-21.943	5.88
17	MP2A	Z	0	5.88
18	MP2A	Mx	.011	5.88
19	MP1A	X	-8.073	2.38
20	MP1A	Z	0	2.38
21	MP1A	Mx	.004	2.38
22	MP1A	X	-8.073	4.38
23	MP1A	Z	0	4.38
24	MP1A	Mx	.004	4.38
25	MP3A	X	-11.111	2
26	MP3A	Z	0	2
27	MP3A	Mx	-.004	2
28	MP2A	X	-10.235	2
29	MP2A	Z	0	2
30	MP2A	Mx	-.003	2
31	OVP1	X	-31.044	2.5
32	OVP1	Z	0	2.5
33	OVP1	Mx	.009	2.5

**Member Point Loads (BLC 25 : Antenna Wi (300 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-29.917	2
2	MP4A	Z	-17.273	2
3	MP4A	Mx	.015	2
4	MP4A	X	-29.917	4.75

**Member Point Loads (BLC 25 : Antenna Wi (300 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
5	MP4A	Z	-17.273	4.75
6	MP4A	Mx	.015	4.75
7	MP2A	X	-21.142	.88
8	MP2A	Z	-12.206	.88
9	MP2A	Mx	.003	.88
10	MP2A	X	-21.142	5.88
11	MP2A	Z	-12.206	5.88
12	MP2A	Mx	.003	5.88
13	MP2A	X	-21.142	.88
14	MP2A	Z	-12.206	.88
15	MP2A	Mx	.018	.88
16	MP2A	X	-21.142	5.88
17	MP2A	Z	-12.206	5.88
18	MP2A	Mx	.018	5.88
19	MP1A	X	-9.348	2.38
20	MP1A	Z	-5.397	2.38
21	MP1A	Mx	.005	2.38
22	MP1A	X	-9.348	4.38
23	MP1A	Z	-5.397	4.38
24	MP1A	Mx	.005	4.38
25	MP3A	X	-10.675	2
26	MP3A	Z	-6.163	2
27	MP3A	Mx	-.004	2
28	MP2A	X	-10.106	2
29	MP2A	Z	-5.835	2
30	MP2A	Mx	-.003	2
31	OVP1	X	-28.435	2.5
32	OVP1	Z	-16.417	2.5
33	OVP1	Mx	.011	2.5

**Member Point Loads (BLC 26 : Antenna Wi (330 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-18.725	2
2	MP4A	Z	-32.432	2
3	MP4A	Mx	.009	2
4	MP4A	X	-18.725	4.75
5	MP4A	Z	-32.432	4.75
6	MP4A	Mx	.009	4.75
7	MP2A	X	-14.677	.88
8	MP2A	Z	-25.421	.88
9	MP2A	Mx	-.007	.88
10	MP2A	X	-14.677	5.88
11	MP2A	Z	-25.421	5.88
12	MP2A	Mx	-.007	5.88
13	MP2A	X	-14.677	.88
14	MP2A	Z	-25.421	.88
15	MP2A	Mx	.022	.88
16	MP2A	X	-14.677	5.88
17	MP2A	Z	-25.421	5.88
18	MP2A	Mx	.022	5.88
19	MP1A	X	-8.118	2.38
20	MP1A	Z	-14.061	2.38
21	MP1A	Mx	.004	2.38
22	MP1A	X	-8.118	4.38
23	MP1A	Z	-14.061	4.38
24	MP1A	Mx	.004	4.38

**Member Point Loads (BLC 26 : Antenna Wi (330 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
25	MP3A	X	-7.379	2
26	MP3A	Z	-12.781	2
27	MP3A	Mx	-.002	2
28	MP2A	X	-7.27	2
29	MP2A	Z	-12.592	2
30	MP2A	Mx	-.002	2
31	OVP1	X	-15.522	2.5
32	OVP1	Z	-26.885	2.5
33	OVP1	Mx	.009	2.5

**Member Point Loads (BLC 27 : Antenna Wm (0 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	2
2	MP4A	Z	-12.806	2
3	MP4A	Mx	0	2
4	MP4A	X	0	4.75
5	MP4A	Z	-12.806	4.75
6	MP4A	Mx	0	4.75
7	MP2A	X	0	.88
8	MP2A	Z	-10.389	.88
9	MP2A	Mx	-.006	.88
10	MP2A	X	0	5.88
11	MP2A	Z	-10.389	5.88
12	MP2A	Mx	-.006	5.88
13	MP2A	X	0	.88
14	MP2A	Z	-10.389	.88
15	MP2A	Mx	.006	.88
16	MP2A	X	0	5.88
17	MP2A	Z	-10.389	5.88
18	MP2A	Mx	.006	5.88
19	MP1A	X	0	2.38
20	MP1A	Z	-6.043	2.38
21	MP1A	Mx	0	2.38
22	MP1A	X	0	4.38
23	MP1A	Z	-6.043	4.38
24	MP1A	Mx	0	4.38
25	MP3A	X	0	2
26	MP3A	Z	-4.809	2
27	MP3A	Mx	0	2
28	MP2A	X	0	2
29	MP2A	Z	-4.809	2
30	MP2A	Mx	0	2
31	OVP1	X	0	2.5
32	OVP1	Z	-8.584	2.5
33	OVP1	Mx	.001	2.5

**Member Point Loads (BLC 28 : Antenna Wm (30 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	6.154	2
2	MP4A	Z	-10.659	2
3	MP4A	Mx	-.003	2
4	MP4A	X	6.154	4.75
5	MP4A	Z	-10.659	4.75
6	MP4A	Mx	-.003	4.75
7	MP2A	X	4.754	.88
8	MP2A	Z	-8.235	.88

**Member Point Loads (BLC 28 : Antenna Wm (30 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2A	Mx	-.007	.88
10	MP2A	X	4.754	5.88
11	MP2A	Z	-8.235	5.88
12	MP2A	Mx	-.007	5.88
13	MP2A	X	4.754	.88
14	MP2A	Z	-8.235	.88
15	MP2A	Mx	.002	.88
16	MP2A	X	4.754	5.88
17	MP2A	Z	-8.235	5.88
18	MP2A	Mx	.002	5.88
19	MP1A	X	2.562	2.38
20	MP1A	Z	-4.437	2.38
21	MP1A	Mx	-.001	2.38
22	MP1A	X	2.562	4.38
23	MP1A	Z	-4.437	4.38
24	MP1A	Mx	-.001	4.38
25	MP3A	X	2.205	2
26	MP3A	Z	-3.819	2
27	MP3A	Mx	.000735	2
28	MP2A	X	2.169	2
29	MP2A	Z	-3.757	2
30	MP2A	Mx	.000723	2
31	OVP1	X	3.983	2.5
32	OVP1	Z	-6.898	2.5
33	OVP1	Mx	0	2.5

**Member Point Loads (BLC 29 : Antenna Wm (60 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	9.795	2
2	MP4A	Z	-5.655	2
3	MP4A	Mx	-.005	2
4	MP4A	X	9.795	4.75
5	MP4A	Z	-5.655	4.75
6	MP4A	Mx	-.005	4.75
7	MP2A	X	6.71	.88
8	MP2A	Z	-3.874	.88
9	MP2A	Mx	-.006	.88
10	MP2A	X	6.71	5.88
11	MP2A	Z	-3.874	5.88
12	MP2A	Mx	-.006	5.88
13	MP2A	X	6.71	.88
14	MP2A	Z	-3.874	.88
15	MP2A	Mx	-.001	.88
16	MP2A	X	6.71	5.88
17	MP2A	Z	-3.874	5.88
18	MP2A	Mx	-.001	5.88
19	MP1A	X	2.845	2.38
20	MP1A	Z	-1.643	2.38
21	MP1A	Mx	-.001	2.38
22	MP1A	X	2.845	4.38
23	MP1A	Z	-1.643	4.38
24	MP1A	Mx	-.001	4.38
25	MP3A	X	3.129	2
26	MP3A	Z	-1.806	2
27	MP3A	Mx	.001	2
28	MP2A	X	2.941	2

**Member Point Loads (BLC 29 : Antenna Wm (60 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	-1.698	2
30	MP2A	Mx	.00098	2
31	OVP1	X	7.434	2.5
32	OVP1	Z	-4.292	2.5
33	OVP1	Mx	-.001	2.5

**Member Point Loads (BLC 30 : Antenna Wm (90 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	10.812	2
2	MP4A	Z	0	2
3	MP4A	Mx	-.005	2
4	MP4A	X	10.812	4.75
5	MP4A	Z	0	4.75
6	MP4A	Mx	-.005	4.75
7	MP2A	X	6.868	.88
8	MP2A	Z	0	.88
9	MP2A	Mx	-.003	.88
10	MP2A	X	6.868	5.88
11	MP2A	Z	0	5.88
12	MP2A	Mx	-.003	5.88
13	MP2A	X	6.868	.88
14	MP2A	Z	0	.88
15	MP2A	Mx	-.003	.88
16	MP2A	X	6.868	5.88
17	MP2A	Z	0	5.88
18	MP2A	Mx	-.003	5.88
19	MP1A	X	2.366	2.38
20	MP1A	Z	0	2.38
21	MP1A	Mx	-.001	2.38
22	MP1A	X	2.366	4.38
23	MP1A	Z	0	4.38
24	MP1A	Mx	-.001	4.38
25	MP3A	X	3.214	2
26	MP3A	Z	0	2
27	MP3A	Mx	.001	2
28	MP2A	X	2.925	2
29	MP2A	Z	0	2
30	MP2A	Mx	.000975	2
31	OVP1	X	9.821	2.5
32	OVP1	Z	0	2.5
33	OVP1	Mx	-.003	2.5

**Member Point Loads (BLC 31 : Antenna Wm (120 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	9.795	2
2	MP4A	Z	5.655	2
3	MP4A	Mx	-.005	2
4	MP4A	X	9.795	4.75
5	MP4A	Z	5.655	4.75
6	MP4A	Mx	-.005	4.75
7	MP2A	X	6.71	.88
8	MP2A	Z	3.874	.88
9	MP2A	Mx	-.001	.88
10	MP2A	X	6.71	5.88
11	MP2A	Z	3.874	5.88
12	MP2A	Mx	-.001	5.88

**Member Point Loads (BLC 31 : Antenna Wm (120 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
13	MP2A	X	6.71	.88
14	MP2A	Z	3.874	.88
15	MP2A	Mx	-.006	.88
16	MP2A	X	6.71	5.88
17	MP2A	Z	3.874	5.88
18	MP2A	Mx	-.006	5.88
19	MP1A	X	2.845	2.38
20	MP1A	Z	1.643	2.38
21	MP1A	Mx	-.001	2.38
22	MP1A	X	2.845	4.38
23	MP1A	Z	1.643	4.38
24	MP1A	Mx	-.001	4.38
25	MP3A	X	3.129	2
26	MP3A	Z	1.806	2
27	MP3A	Mx	.001	2
28	MP2A	X	2.941	2
29	MP2A	Z	1.698	2
30	MP2A	Mx	.00098	2
31	OVP1	X	9.041	2.5
32	OVP1	Z	5.22	2.5
33	OVP1	Mx	-.003	2.5

**Member Point Loads (BLC 32 : Antenna Wm (150 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	6.154	2
2	MP4A	Z	10.659	2
3	MP4A	Mx	-.003	2
4	MP4A	X	6.154	4.75
5	MP4A	Z	10.659	4.75
6	MP4A	Mx	-.003	4.75
7	MP2A	X	4.754	.88
8	MP2A	Z	8.235	.88
9	MP2A	Mx	.002	.88
10	MP2A	X	4.754	5.88
11	MP2A	Z	8.235	5.88
12	MP2A	Mx	.002	5.88
13	MP2A	X	4.754	.88
14	MP2A	Z	8.235	.88
15	MP2A	Mx	-.007	.88
16	MP2A	X	4.754	5.88
17	MP2A	Z	8.235	5.88
18	MP2A	Mx	-.007	5.88
19	MP1A	X	2.562	2.38
20	MP1A	Z	4.437	2.38
21	MP1A	Mx	-.001	2.38
22	MP1A	X	2.562	4.38
23	MP1A	Z	4.437	4.38
24	MP1A	Mx	-.001	4.38
25	MP3A	X	2.205	2
26	MP3A	Z	3.819	2
27	MP3A	Mx	.000735	2
28	MP2A	X	2.169	2
29	MP2A	Z	3.757	2
30	MP2A	Mx	.000723	2
31	OVP1	X	4.911	2.5
32	OVP1	Z	8.506	2.5

**Member Point Loads (BLC 32 : Antenna Wm (150 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
33	OVP1	Mx	-.003	2.5

**Member Point Loads (BLC 33 : Antenna Wm (180 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	2
2	MP4A	Z	12.806	2
3	MP4A	Mx	0	2
4	MP4A	X	0	4.75
5	MP4A	Z	12.806	4.75
6	MP4A	Mx	0	4.75
7	MP2A	X	0	.88
8	MP2A	Z	10.389	.88
9	MP2A	Mx	.006	.88
10	MP2A	X	0	5.88
11	MP2A	Z	10.389	5.88
12	MP2A	Mx	.006	5.88
13	MP2A	X	0	.88
14	MP2A	Z	10.389	.88
15	MP2A	Mx	-.006	.88
16	MP2A	X	0	5.88
17	MP2A	Z	10.389	5.88
18	MP2A	Mx	-.006	5.88
19	MP1A	X	0	2.38
20	MP1A	Z	6.043	2.38
21	MP1A	Mx	0	2.38
22	MP1A	X	0	4.38
23	MP1A	Z	6.043	4.38
24	MP1A	Mx	0	4.38
25	MP3A	X	0	2
26	MP3A	Z	4.809	2
27	MP3A	Mx	0	2
28	MP2A	X	0	2
29	MP2A	Z	4.809	2
30	MP2A	Mx	0	2
31	OVP1	X	0	2.5
32	OVP1	Z	8.584	2.5
33	OVP1	Mx	-.001	2.5

**Member Point Loads (BLC 34 : Antenna Wm (210 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-6.154	2
2	MP4A	Z	10.659	2
3	MP4A	Mx	.003	2
4	MP4A	X	-6.154	4.75
5	MP4A	Z	10.659	4.75
6	MP4A	Mx	.003	4.75
7	MP2A	X	-4.754	.88
8	MP2A	Z	8.235	.88
9	MP2A	Mx	.007	.88
10	MP2A	X	-4.754	5.88
11	MP2A	Z	8.235	5.88
12	MP2A	Mx	.007	5.88
13	MP2A	X	-4.754	.88
14	MP2A	Z	8.235	.88
15	MP2A	Mx	-.002	.88
16	MP2A	X	-4.754	5.88

**Member Point Loads (BLC 34 : Antenna Wm (210 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
17	MP2A	Z	8.235	5.88
18	MP2A	Mx	-.002	5.88
19	MP1A	X	-2.562	2.38
20	MP1A	Z	4.437	2.38
21	MP1A	Mx	.001	2.38
22	MP1A	X	-2.562	4.38
23	MP1A	Z	4.437	4.38
24	MP1A	Mx	.001	4.38
25	MP3A	X	-2.205	2
26	MP3A	Z	3.819	2
27	MP3A	Mx	-.000735	2
28	MP2A	X	-2.169	2
29	MP2A	Z	3.757	2
30	MP2A	Mx	-.000723	2
31	OVP1	X	-3.983	2.5
32	OVP1	Z	6.898	2.5
33	OVP1	Mx	0	2.5

**Member Point Loads (BLC 35 : Antenna Wm (240 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-9.795	2
2	MP4A	Z	5.655	2
3	MP4A	Mx	.005	2
4	MP4A	X	-9.795	4.75
5	MP4A	Z	5.655	4.75
6	MP4A	Mx	.005	4.75
7	MP2A	X	-6.71	.88
8	MP2A	Z	3.874	.88
9	MP2A	Mx	.006	.88
10	MP2A	X	-6.71	5.88
11	MP2A	Z	3.874	5.88
12	MP2A	Mx	.006	5.88
13	MP2A	X	-6.71	.88
14	MP2A	Z	3.874	.88
15	MP2A	Mx	.001	.88
16	MP2A	X	-6.71	5.88
17	MP2A	Z	3.874	5.88
18	MP2A	Mx	.001	5.88
19	MP1A	X	-2.845	2.38
20	MP1A	Z	1.643	2.38
21	MP1A	Mx	.001	2.38
22	MP1A	X	-2.845	4.38
23	MP1A	Z	1.643	4.38
24	MP1A	Mx	.001	4.38
25	MP3A	X	-3.129	2
26	MP3A	Z	1.806	2
27	MP3A	Mx	-.001	2
28	MP2A	X	-2.941	2
29	MP2A	Z	1.698	2
30	MP2A	Mx	-.00098	2
31	OVP1	X	-7.434	2.5
32	OVP1	Z	4.292	2.5
33	OVP1	Mx	.001	2.5

**Member Point Loads (BLC 36 : Antenna Wm (270 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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**Member Point Loads (BLC 36 : Antenna Wm (270 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-10.812	2
2	MP4A	Z	0	2
3	MP4A	Mx	.005	2
4	MP4A	X	-10.812	4.75
5	MP4A	Z	0	4.75
6	MP4A	Mx	.005	4.75
7	MP2A	X	-6.868	.88
8	MP2A	Z	0	.88
9	MP2A	Mx	.003	.88
10	MP2A	X	-6.868	5.88
11	MP2A	Z	0	5.88
12	MP2A	Mx	.003	5.88
13	MP2A	X	-6.868	.88
14	MP2A	Z	0	.88
15	MP2A	Mx	.003	.88
16	MP2A	X	-6.868	5.88
17	MP2A	Z	0	5.88
18	MP2A	Mx	.003	5.88
19	MP1A	X	-2.366	2.38
20	MP1A	Z	0	2.38
21	MP1A	Mx	.001	2.38
22	MP1A	X	-2.366	4.38
23	MP1A	Z	0	4.38
24	MP1A	Mx	.001	4.38
25	MP3A	X	-3.214	2
26	MP3A	Z	0	2
27	MP3A	Mx	-.001	2
28	MP2A	X	-2.925	2
29	MP2A	Z	0	2
30	MP2A	Mx	-.000975	2
31	OVP1	X	-9.821	2.5
32	OVP1	Z	0	2.5
33	OVP1	Mx	.003	2.5

**Member Point Loads (BLC 37 : Antenna Wm (300 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-9.795	2
2	MP4A	Z	-5.655	2
3	MP4A	Mx	.005	2
4	MP4A	X	-9.795	4.75
5	MP4A	Z	-5.655	4.75
6	MP4A	Mx	.005	4.75
7	MP2A	X	-6.71	.88
8	MP2A	Z	-3.874	.88
9	MP2A	Mx	.001	.88
10	MP2A	X	-6.71	5.88
11	MP2A	Z	-3.874	5.88
12	MP2A	Mx	.001	5.88
13	MP2A	X	-6.71	.88
14	MP2A	Z	-3.874	.88
15	MP2A	Mx	.006	.88
16	MP2A	X	-6.71	5.88
17	MP2A	Z	-3.874	5.88
18	MP2A	Mx	.006	5.88
19	MP1A	X	-2.845	2.38
20	MP1A	Z	-1.643	2.38

**Member Point Loads (BLC 37 : Antenna Wm (300 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
21	MP1A	Mx	.001	2.38
22	MP1A	X	-2.845	4.38
23	MP1A	Z	-1.643	4.38
24	MP1A	Mx	.001	4.38
25	MP3A	X	-3.129	2
26	MP3A	Z	-1.806	2
27	MP3A	Mx	-.001	2
28	MP2A	X	-2.941	2
29	MP2A	Z	-1.698	2
30	MP2A	Mx	-.00098	2
31	OVP1	X	-9.041	2.5
32	OVP1	Z	-5.22	2.5
33	OVP1	Mx	.003	2.5

**Member Point Loads (BLC 38 : Antenna Wm (330 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-6.154	2
2	MP4A	Z	-10.659	2
3	MP4A	Mx	.003	2
4	MP4A	X	-6.154	4.75
5	MP4A	Z	-10.659	4.75
6	MP4A	Mx	.003	4.75
7	MP2A	X	-4.754	.88
8	MP2A	Z	-8.235	.88
9	MP2A	Mx	-.002	.88
10	MP2A	X	-4.754	5.88
11	MP2A	Z	-8.235	5.88
12	MP2A	Mx	-.002	5.88
13	MP2A	X	-4.754	.88
14	MP2A	Z	-8.235	.88
15	MP2A	Mx	.007	.88
16	MP2A	X	-4.754	5.88
17	MP2A	Z	-8.235	5.88
18	MP2A	Mx	.007	5.88
19	MP1A	X	-2.562	2.38
20	MP1A	Z	-4.437	2.38
21	MP1A	Mx	.001	2.38
22	MP1A	X	-2.562	4.38
23	MP1A	Z	-4.437	4.38
24	MP1A	Mx	.001	4.38
25	MP3A	X	-2.205	2
26	MP3A	Z	-3.819	2
27	MP3A	Mx	-.000735	2
28	MP2A	X	-2.169	2
29	MP2A	Z	-3.757	2
30	MP2A	Mx	-.000723	2
31	OVP1	X	-4.911	2.5
32	OVP1	Z	-8.506	2.5
33	OVP1	Mx	.003	2.5

**Member Point Loads (BLC 77 : Lm1)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M10	Y	-500	0

**Member Point Loads (BLC 78 : Lm2)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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**Member Point Loads (BLC 78 : Lm2) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M12	Y	-500	0

**Member Point Loads (BLC 79 : Lv1)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	0

**Member Point Loads (BLC 80 : Lv2)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	%50

**Member Point Loads (BLC 81 : Antenna Ev)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	-.63	2
2	MP4A	My	-.000315	2
3	MP4A	Mz	0	2
4	MP4A	Y	-.63	4.75
5	MP4A	My	-.000315	4.75
6	MP4A	Mz	0	4.75
7	MP2A	Y	-.918	.88
8	MP2A	My	-.000459	.88
9	MP2A	Mz	.000536	.88
10	MP2A	Y	-.918	5.88
11	MP2A	My	-.000459	5.88
12	MP2A	Mz	.000536	5.88
13	MP2A	Y	-.918	.88
14	MP2A	My	-.000459	.88
15	MP2A	Mz	-.000536	.88
16	MP2A	Y	-.918	5.88
17	MP2A	My	-.000459	5.88
18	MP2A	Mz	-.000536	5.88
19	MP1A	Y	-1.83	2.38
20	MP1A	My	-.000915	2.38
21	MP1A	Mz	0	2.38
22	MP1A	Y	-1.83	4.38
23	MP1A	My	-.000915	4.38
24	MP1A	Mz	0	4.38
25	MP3A	Y	-3.139	2
26	MP3A	My	.001	2
27	MP3A	Mz	0	2
28	MP2A	Y	-2.954	2
29	MP2A	My	.000985	2
30	MP2A	Mz	0	2
31	OVP1	Y	-1.345	2.5
32	OVP1	My	-.000388	2.5
33	OVP1	Mz	-.000224	2.5

**Member Point Loads (BLC 82 : Antenna Eh (0 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Z	-1.576	2
2	MP4A	Mx	0	2
3	MP4A	Z	-1.576	4.75
4	MP4A	Mx	0	4.75
5	MP2A	Z	-2.296	.88
6	MP2A	Mx	-.001	.88
7	MP2A	Z	-2.296	5.88

**Member Point Loads (BLC 82 : Antenna Eh (0 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
8	MP2A	Mx	-.001	5.88
9	MP2A	Z	-2.296	.88
10	MP2A	Mx	.001	.88
11	MP2A	Z	-2.296	5.88
12	MP2A	Mx	.001	5.88
13	MP1A	Z	-4.576	2.38
14	MP1A	Mx	0	2.38
15	MP1A	Z	-4.576	4.38
16	MP1A	Mx	0	4.38
17	MP3A	Z	-7.848	2
18	MP3A	Mx	0	2
19	MP2A	Z	-7.386	2
20	MP2A	Mx	0	2
21	OVP1	Z	-3.362	2.5
22	OVP1	Mx	.00056	2.5

**Member Point Loads (BLC 83 : Antenna Eh (90 Deg))**

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	1.576	2
2	MP4A	Mx	-.000788	2
3	MP4A	X	1.576	4.75
4	MP4A	Mx	-.000788	4.75
5	MP2A	X	2.296	.88
6	MP2A	Mx	-.001	.88
7	MP2A	X	2.296	5.88
8	MP2A	Mx	-.001	5.88
9	MP2A	X	2.296	.88
10	MP2A	Mx	-.001	.88
11	MP2A	X	2.296	5.88
12	MP2A	Mx	-.001	5.88
13	MP1A	X	4.576	2.38
14	MP1A	Mx	-.002	2.38
15	MP1A	X	4.576	4.38
16	MP1A	Mx	-.002	4.38
17	MP3A	X	7.848	2
18	MP3A	Mx	.003	2
19	MP2A	X	7.386	2
20	MP2A	Mx	.002	2
21	OVP1	X	3.362	2.5
22	OVP1	Mx	-.000971	2.5

**Member Distributed Loads (BLC 40 : Structure Di)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-5.66	-5.66	0	%100
2	M2	Y	-5.66	-5.66	0	%100
3	M13	Y	-6.617	-6.617	0	%100
4	M14	Y	-6.617	-6.617	0	%100
5	M15	Y	-6.617	-6.617	0	%100
6	M16	Y	-6.617	-6.617	0	%100
7	OVP	Y	-4.957	-4.957	0	%100
8	M18	Y	-4.957	-4.957	0	%100
9	M19	Y	-4.957	-4.957	0	%100
10	M20	Y	-4.957	-4.957	0	%100
11	M21	Y	-6.617	-6.617	0	%100
12	M22	Y	-6.617	-6.617	0	%100

**Member Distributed Loads (BLC 40 : Structure Di) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
13	M23	Y	-6.617	-6.617	0	%100
14	M24	Y	-6.617	-6.617	0	%100
15	M25	Y	-2.673	-2.673	0	%100
16	M26	Y	-2.673	-2.673	0	%100
17	M27	Y	-2.673	-2.673	0	%100
18	M28	Y	-2.673	-2.673	0	%100
19	MP4A	Y	-4.957	-4.957	0	%100
20	MP3A	Y	-4.957	-4.957	0	%100
21	MP2A	Y	-4.957	-4.957	0	%100
22	MP1A	Y	-4.957	-4.957	0	%100
23	M44	Y	-2.497	-2.497	0	%100
24	M45	Y	-2.497	-2.497	0	%100
25	M46	Y	-2.497	-2.497	0	%100
26	M47	Y	-2.497	-2.497	0	%100
27	M44A	Y	-4.957	-4.957	0	%100
28	M44B	Y	-4.957	-4.957	0	%100
29	OVP1	Y	-4.957	-4.957	0	%100

**Member Distributed Loads (BLC 41 : Structure Wo (0 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	-11.438	-11.438	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-11.438	-11.438	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	-4.516	-4.516	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-4.516	-4.516	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-4.516	-4.516	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-4.516	-4.516	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-2.486	-2.486	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-2.486	-2.486	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-2.486	-2.486	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-2.486	-2.486	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-2.575	-2.575	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-2.575	-2.575	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-2.575	-2.575	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-2.575	-2.575	0	%100

**Member Distributed Loads (BLC 41 : Structure Wo (0 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	MP4A	X	0	0	0	%100
38	MP4A	Z	-9.448	-9.448	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-9.448	-9.448	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	-9.448	-9.448	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	-9.448	-9.448	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-2.486	-2.486	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-2.486	-2.486	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-2.486	-2.486	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	-2.486	-2.486	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	-.793	-.793	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	-.793	-.793	0	%100
57	OVP1	X	0	0	0	%100
58	OVP1	Z	-9.448	-9.448	0	%100

**Member Distributed Loads (BLC 42 : Structure Wo (30 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	4.289	4.289	0	%100
2	M1	Z	-7.429	-7.429	0	%100
3	M2	X	4.289	4.289	0	%100
4	M2	Z	-7.429	-7.429	0	%100
5	M13	X	.311	.311	0	%100
6	M13	Z	-.538	-.538	0	%100
7	M14	X	.311	.311	0	%100
8	M14	Z	-.538	-.538	0	%100
9	M15	X	.311	.311	0	%100
10	M15	Z	-.538	-.538	0	%100
11	M16	X	.311	.311	0	%100
12	M16	Z	-.538	-.538	0	%100
13	OVP	X	.508	.508	0	%100
14	OVP	Z	-.88	-.88	0	%100
15	M18	X	.508	.508	0	%100
16	M18	Z	-.88	-.88	0	%100
17	M19	X	3.571	3.571	0	%100
18	M19	Z	-6.185	-6.185	0	%100
19	M20	X	3.571	3.571	0	%100
20	M20	Z	-6.185	-6.185	0	%100
21	M21	X	.932	.932	0	%100
22	M21	Z	-1.615	-1.615	0	%100
23	M22	X	.932	.932	0	%100
24	M22	Z	-1.615	-1.615	0	%100
25	M23	X	.932	.932	0	%100
26	M23	Z	-1.615	-1.615	0	%100
27	M24	X	.932	.932	0	%100
28	M24	Z	-1.615	-1.615	0	%100
29	M25	X	1.03	1.03	0	%100
30	M25	Z	-1.783	-1.783	0	%100
31	M26	X	1.03	1.03	0	%100

**Member Distributed Loads (BLC 42 : Structure Wo (30 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
32	M26	Z	-1.783	-1.783	0	%100
33	M27	X	1.481	1.481	0	%100
34	M27	Z	-2.566	-2.566	0	%100
35	M28	X	1.481	1.481	0	%100
36	M28	Z	-2.566	-2.566	0	%100
37	MP4A	X	4.724	4.724	0	%100
38	MP4A	Z	-8.183	-8.183	0	%100
39	MP3A	X	4.724	4.724	0	%100
40	MP3A	Z	-8.183	-8.183	0	%100
41	MP2A	X	4.724	4.724	0	%100
42	MP2A	Z	-8.183	-8.183	0	%100
43	MP1A	X	4.724	4.724	0	%100
44	MP1A	Z	-8.183	-8.183	0	%100
45	M44	X	1.243	1.243	0	%100
46	M44	Z	-2.153	-2.153	0	%100
47	M45	X	1.243	1.243	0	%100
48	M45	Z	-2.153	-2.153	0	%100
49	M46	X	1.243	1.243	0	%100
50	M46	Z	-2.153	-2.153	0	%100
51	M47	X	1.243	1.243	0	%100
52	M47	Z	-2.153	-2.153	0	%100
53	M44A	X	2.51	2.51	0	%100
54	M44A	Z	-4.347	-4.347	0	%100
55	M44B	X	.251	.251	0	%100
56	M44B	Z	-.435	-.435	0	%100
57	OVP1	X	4.724	4.724	0	%100
58	OVP1	Z	-8.183	-8.183	0	%100

**Member Distributed Loads (BLC 43 : Structure Wo (60 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.476	2.476	0	%100
2	M1	Z	-1.43	-1.43	0	%100
3	M2	X	2.476	2.476	0	%100
4	M2	Z	-1.43	-1.43	0	%100
5	M13	X	1.615	1.615	0	%100
6	M13	Z	-.932	-.932	0	%100
7	M14	X	1.615	1.615	0	%100
8	M14	Z	-.932	-.932	0	%100
9	M15	X	1.615	1.615	0	%100
10	M15	Z	-.932	-.932	0	%100
11	M16	X	1.615	1.615	0	%100
12	M16	Z	-.932	-.932	0	%100
13	OVP	X	.124	.124	0	%100
14	OVP	Z	-.072	-.072	0	%100
15	M18	X	.124	.124	0	%100
16	M18	Z	-.072	-.072	0	%100
17	M19	X	5.428	5.428	0	%100
18	M19	Z	-3.134	-3.134	0	%100
19	M20	X	5.428	5.428	0	%100
20	M20	Z	-3.134	-3.134	0	%100
21	M21	X	.538	.538	0	%100
22	M21	Z	-.311	-.311	0	%100
23	M22	X	.538	.538	0	%100
24	M22	Z	-.311	-.311	0	%100
25	M23	X	.538	.538	0	%100
26	M23	Z	-.311	-.311	0	%100

**Member Distributed Loads (BLC 43 : Structure Wo (60 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
27	M24	X	.538	.538	0	%100
28	M24	Z	-.311	-.311	0	%100
29	M25	X	1.672	1.672	0	%100
30	M25	Z	-.965	-.965	0	%100
31	M26	X	1.672	1.672	0	%100
32	M26	Z	-.965	-.965	0	%100
33	M27	X	2.454	2.454	0	%100
34	M27	Z	-1.417	-1.417	0	%100
35	M28	X	2.454	2.454	0	%100
36	M28	Z	-1.417	-1.417	0	%100
37	MP4A	X	8.183	8.183	0	%100
38	MP4A	Z	-4.724	-4.724	0	%100
39	MP3A	X	8.183	8.183	0	%100
40	MP3A	Z	-4.724	-4.724	0	%100
41	MP2A	X	8.183	8.183	0	%100
42	MP2A	Z	-4.724	-4.724	0	%100
43	MP1A	X	8.183	8.183	0	%100
44	MP1A	Z	-4.724	-4.724	0	%100
45	M44	X	2.153	2.153	0	%100
46	M44	Z	-1.243	-1.243	0	%100
47	M45	X	2.153	2.153	0	%100
48	M45	Z	-1.243	-1.243	0	%100
49	M46	X	2.153	2.153	0	%100
50	M46	Z	-1.243	-1.243	0	%100
51	M47	X	2.153	2.153	0	%100
52	M47	Z	-1.243	-1.243	0	%100
53	M44A	X	7.754	7.754	0	%100
54	M44A	Z	-4.477	-4.477	0	%100
55	M44B	X	3.842	3.842	0	%100
56	M44B	Z	-2.218	-2.218	0	%100
57	OVP1	X	8.183	8.183	0	%100
58	OVP1	Z	-4.724	-4.724	0	%100

**Member Distributed Loads (BLC 44 : Structure Wo (90 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	2.486	2.486	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	2.486	2.486	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	2.486	2.486	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	2.486	2.486	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	2.769	2.769	0	%100
14	OVP	Z	0	0	0	%100
15	M18	X	2.769	2.769	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	2.769	2.769	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	2.769	2.769	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100

**Member Distributed Loads (BLC 44 : Structure Wo (90 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	2.318	2.318	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	2.318	2.318	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	2.318	2.318	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	2.318	2.318	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	9.448	9.448	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	9.448	9.448	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	9.448	9.448	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	9.448	9.448	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	2.486	2.486	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	2.486	2.486	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	2.486	2.486	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	2.486	2.486	0	%100
52	M47	Z	0	0	0	%100
53	M44A	X	8.663	8.663	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	8.663	8.663	0	%100
56	M44B	Z	0	0	0	%100
57	OVP1	X	9.448	9.448	0	%100
58	OVP1	Z	0	0	0	%100

**Member Distributed Loads (BLC 45 : Structure Wo (120 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.476	2.476	0	%100
2	M1	Z	1.43	1.43	0	%100
3	M2	X	2.476	2.476	0	%100
4	M2	Z	1.43	1.43	0	%100
5	M13	X	1.615	1.615	0	%100
6	M13	Z	.932	.932	0	%100
7	M14	X	1.615	1.615	0	%100
8	M14	Z	.932	.932	0	%100
9	M15	X	1.615	1.615	0	%100
10	M15	Z	.932	.932	0	%100
11	M16	X	1.615	1.615	0	%100
12	M16	Z	.932	.932	0	%100
13	OVP	X	5.428	5.428	0	%100
14	OVP	Z	3.134	3.134	0	%100
15	M18	X	5.428	5.428	0	%100
16	M18	Z	3.134	3.134	0	%100

**Member Distributed Loads (BLC 45 : Structure Wo (120 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
17	M19	X	.124	.124	0	%100
18	M19	Z	.072	.072	0	%100
19	M20	X	.124	.124	0	%100
20	M20	Z	.072	.072	0	%100
21	M21	X	.538	.538	0	%100
22	M21	Z	.311	.311	0	%100
23	M22	X	.538	.538	0	%100
24	M22	Z	.311	.311	0	%100
25	M23	X	.538	.538	0	%100
26	M23	Z	.311	.311	0	%100
27	M24	X	.538	.538	0	%100
28	M24	Z	.311	.311	0	%100
29	M25	X	2.454	2.454	0	%100
30	M25	Z	1.417	1.417	0	%100
31	M26	X	2.454	2.454	0	%100
32	M26	Z	1.417	1.417	0	%100
33	M27	X	1.672	1.672	0	%100
34	M27	Z	.965	.965	0	%100
35	M28	X	1.672	1.672	0	%100
36	M28	Z	.965	.965	0	%100
37	MP4A	X	8.183	8.183	0	%100
38	MP4A	Z	4.724	4.724	0	%100
39	MP3A	X	8.183	8.183	0	%100
40	MP3A	Z	4.724	4.724	0	%100
41	MP2A	X	8.183	8.183	0	%100
42	MP2A	Z	4.724	4.724	0	%100
43	MP1A	X	8.183	8.183	0	%100
44	MP1A	Z	4.724	4.724	0	%100
45	M44	X	2.153	2.153	0	%100
46	M44	Z	1.243	1.243	0	%100
47	M45	X	2.153	2.153	0	%100
48	M45	Z	1.243	1.243	0	%100
49	M46	X	2.153	2.153	0	%100
50	M46	Z	1.243	1.243	0	%100
51	M47	X	2.153	2.153	0	%100
52	M47	Z	1.243	1.243	0	%100
53	M44A	X	3.842	3.842	0	%100
54	M44A	Z	2.218	2.218	0	%100
55	M44B	X	7.754	7.754	0	%100
56	M44B	Z	4.477	4.477	0	%100
57	OVP1	X	8.183	8.183	0	%100
58	OVP1	Z	4.724	4.724	0	%100

**Member Distributed Loads (BLC 46 : Structure Wo (150 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	4.289	4.289	0	%100
2	M1	Z	7.429	7.429	0	%100
3	M2	X	4.289	4.289	0	%100
4	M2	Z	7.429	7.429	0	%100
5	M13	X	.311	.311	0	%100
6	M13	Z	.538	.538	0	%100
7	M14	X	.311	.311	0	%100
8	M14	Z	.538	.538	0	%100
9	M15	X	.311	.311	0	%100
10	M15	Z	.538	.538	0	%100
11	M16	X	.311	.311	0	%100

**Member Distributed Loads (BLC 46 : Structure Wo (150 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
12	M16	Z	.538	.538	0	%100
13	OVP	X	3.571	3.571	0	%100
14	OVP	Z	6.185	6.185	0	%100
15	M18	X	3.571	3.571	0	%100
16	M18	Z	6.185	6.185	0	%100
17	M19	X	.508	.508	0	%100
18	M19	Z	.88	.88	0	%100
19	M20	X	.508	.508	0	%100
20	M20	Z	.88	.88	0	%100
21	M21	X	.932	.932	0	%100
22	M21	Z	1.615	1.615	0	%100
23	M22	X	.932	.932	0	%100
24	M22	Z	1.615	1.615	0	%100
25	M23	X	.932	.932	0	%100
26	M23	Z	1.615	1.615	0	%100
27	M24	X	.932	.932	0	%100
28	M24	Z	1.615	1.615	0	%100
29	M25	X	1.481	1.481	0	%100
30	M25	Z	2.566	2.566	0	%100
31	M26	X	1.481	1.481	0	%100
32	M26	Z	2.566	2.566	0	%100
33	M27	X	1.03	1.03	0	%100
34	M27	Z	1.783	1.783	0	%100
35	M28	X	1.03	1.03	0	%100
36	M28	Z	1.783	1.783	0	%100
37	MP4A	X	4.724	4.724	0	%100
38	MP4A	Z	8.183	8.183	0	%100
39	MP3A	X	4.724	4.724	0	%100
40	MP3A	Z	8.183	8.183	0	%100
41	MP2A	X	4.724	4.724	0	%100
42	MP2A	Z	8.183	8.183	0	%100
43	MP1A	X	4.724	4.724	0	%100
44	MP1A	Z	8.183	8.183	0	%100
45	M44	X	1.243	1.243	0	%100
46	M44	Z	2.153	2.153	0	%100
47	M45	X	1.243	1.243	0	%100
48	M45	Z	2.153	2.153	0	%100
49	M46	X	1.243	1.243	0	%100
50	M46	Z	2.153	2.153	0	%100
51	M47	X	1.243	1.243	0	%100
52	M47	Z	2.153	2.153	0	%100
53	M44A	X	.251	.251	0	%100
54	M44A	Z	.435	.435	0	%100
55	M44B	X	2.51	2.51	0	%100
56	M44B	Z	4.347	4.347	0	%100
57	OVP1	X	4.724	4.724	0	%100
58	OVP1	Z	8.183	8.183	0	%100

**Member Distributed Loads (BLC 47 : Structure Wo (180 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	11.438	11.438	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	11.438	11.438	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100

**Member Distributed Loads (BLC 47 : Structure Wo (180 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	4.516	4.516	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	4.516	4.516	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	4.516	4.516	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	4.516	4.516	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	2.486	2.486	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	2.486	2.486	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	2.486	2.486	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	2.486	2.486	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	2.575	2.575	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	2.575	2.575	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	2.575	2.575	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	2.575	2.575	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	9.448	9.448	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	9.448	9.448	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	9.448	9.448	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	9.448	9.448	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	2.486	2.486	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	2.486	2.486	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	2.486	2.486	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	2.486	2.486	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	.793	.793	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	.793	.793	0	%100
57	OVP1	X	0	0	0	%100
58	OVP1	Z	9.448	9.448	0	%100

**Member Distributed Loads (BLC 48 : Structure Wo (210 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.289	-4.289	0	%100

**Member Distributed Loads (BLC 48 : Structure Wo (210 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
2	M1	Z	7.429	7.429	0	%100
3	M2	X	-4.289	-4.289	0	%100
4	M2	Z	7.429	7.429	0	%100
5	M13	X	-.311	-.311	0	%100
6	M13	Z	.538	.538	0	%100
7	M14	X	-.311	-.311	0	%100
8	M14	Z	.538	.538	0	%100
9	M15	X	-.311	-.311	0	%100
10	M15	Z	.538	.538	0	%100
11	M16	X	-.311	-.311	0	%100
12	M16	Z	.538	.538	0	%100
13	OVP	X	-.508	-.508	0	%100
14	OVP	Z	.88	.88	0	%100
15	M18	X	-.508	-.508	0	%100
16	M18	Z	.88	.88	0	%100
17	M19	X	-3.571	-3.571	0	%100
18	M19	Z	6.185	6.185	0	%100
19	M20	X	-3.571	-3.571	0	%100
20	M20	Z	6.185	6.185	0	%100
21	M21	X	-.932	-.932	0	%100
22	M21	Z	1.615	1.615	0	%100
23	M22	X	-.932	-.932	0	%100
24	M22	Z	1.615	1.615	0	%100
25	M23	X	-.932	-.932	0	%100
26	M23	Z	1.615	1.615	0	%100
27	M24	X	-.932	-.932	0	%100
28	M24	Z	1.615	1.615	0	%100
29	M25	X	-1.03	-1.03	0	%100
30	M25	Z	1.783	1.783	0	%100
31	M26	X	-1.03	-1.03	0	%100
32	M26	Z	1.783	1.783	0	%100
33	M27	X	-1.481	-1.481	0	%100
34	M27	Z	2.566	2.566	0	%100
35	M28	X	-1.481	-1.481	0	%100
36	M28	Z	2.566	2.566	0	%100
37	MP4A	X	-4.724	-4.724	0	%100
38	MP4A	Z	8.183	8.183	0	%100
39	MP3A	X	-4.724	-4.724	0	%100
40	MP3A	Z	8.183	8.183	0	%100
41	MP2A	X	-4.724	-4.724	0	%100
42	MP2A	Z	8.183	8.183	0	%100
43	MP1A	X	-4.724	-4.724	0	%100
44	MP1A	Z	8.183	8.183	0	%100
45	M44	X	-1.243	-1.243	0	%100
46	M44	Z	2.153	2.153	0	%100
47	M45	X	-1.243	-1.243	0	%100
48	M45	Z	2.153	2.153	0	%100
49	M46	X	-1.243	-1.243	0	%100
50	M46	Z	2.153	2.153	0	%100
51	M47	X	-1.243	-1.243	0	%100
52	M47	Z	2.153	2.153	0	%100
53	M44A	X	-2.51	-2.51	0	%100
54	M44A	Z	4.347	4.347	0	%100
55	M44B	X	-.251	-.251	0	%100
56	M44B	Z	.435	.435	0	%100
57	OVP1	X	-4.724	-4.724	0	%100
58	OVP1	Z	8.183	8.183	0	%100

**Member Distributed Loads (BLC 49 : Structure Wo (240 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.476	-2.476	0	%100
2	M1	Z	1.43	1.43	0	%100
3	M2	X	-2.476	-2.476	0	%100
4	M2	Z	1.43	1.43	0	%100
5	M13	X	-1.615	-1.615	0	%100
6	M13	Z	.932	.932	0	%100
7	M14	X	-1.615	-1.615	0	%100
8	M14	Z	.932	.932	0	%100
9	M15	X	-1.615	-1.615	0	%100
10	M15	Z	.932	.932	0	%100
11	M16	X	-1.615	-1.615	0	%100
12	M16	Z	.932	.932	0	%100
13	OVP	X	-.124	-.124	0	%100
14	OVP	Z	.072	.072	0	%100
15	M18	X	-.124	-.124	0	%100
16	M18	Z	.072	.072	0	%100
17	M19	X	-5.428	-5.428	0	%100
18	M19	Z	3.134	3.134	0	%100
19	M20	X	-5.428	-5.428	0	%100
20	M20	Z	3.134	3.134	0	%100
21	M21	X	-.538	-.538	0	%100
22	M21	Z	.311	.311	0	%100
23	M22	X	-.538	-.538	0	%100
24	M22	Z	.311	.311	0	%100
25	M23	X	-.538	-.538	0	%100
26	M23	Z	.311	.311	0	%100
27	M24	X	-.538	-.538	0	%100
28	M24	Z	.311	.311	0	%100
29	M25	X	-1.672	-1.672	0	%100
30	M25	Z	.965	.965	0	%100
31	M26	X	-1.672	-1.672	0	%100
32	M26	Z	.965	.965	0	%100
33	M27	X	-2.454	-2.454	0	%100
34	M27	Z	1.417	1.417	0	%100
35	M28	X	-2.454	-2.454	0	%100
36	M28	Z	1.417	1.417	0	%100
37	MP4A	X	-8.183	-8.183	0	%100
38	MP4A	Z	4.724	4.724	0	%100
39	MP3A	X	-8.183	-8.183	0	%100
40	MP3A	Z	4.724	4.724	0	%100
41	MP2A	X	-8.183	-8.183	0	%100
42	MP2A	Z	4.724	4.724	0	%100
43	MP1A	X	-8.183	-8.183	0	%100
44	MP1A	Z	4.724	4.724	0	%100
45	M44	X	-2.153	-2.153	0	%100
46	M44	Z	1.243	1.243	0	%100
47	M45	X	-2.153	-2.153	0	%100
48	M45	Z	1.243	1.243	0	%100
49	M46	X	-2.153	-2.153	0	%100
50	M46	Z	1.243	1.243	0	%100
51	M47	X	-2.153	-2.153	0	%100
52	M47	Z	1.243	1.243	0	%100
53	M44A	X	-7.754	-7.754	0	%100
54	M44A	Z	4.477	4.477	0	%100
55	M44B	X	-3.842	-3.842	0	%100
56	M44B	Z	2.218	2.218	0	%100
57	OVP1	X	-8.183	-8.183	0	%100

**Member Distributed Loads (BLC 49 : Structure Wo (240 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	OVP1	Z	4.724	4.724	0	%100

**Member Distributed Loads (BLC 50 : Structure Wo (270 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-2.486	-2.486	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-2.486	-2.486	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-2.486	-2.486	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-2.486	-2.486	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	-2.769	-2.769	0	%100
14	OVP	Z	0	0	0	%100
15	M18	X	-2.769	-2.769	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-2.769	-2.769	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-2.769	-2.769	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-2.318	-2.318	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-2.318	-2.318	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-2.318	-2.318	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-2.318	-2.318	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	-9.448	-9.448	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	-9.448	-9.448	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	-9.448	-9.448	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	-9.448	-9.448	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	-2.486	-2.486	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-2.486	-2.486	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-2.486	-2.486	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	-2.486	-2.486	0	%100
52	M47	Z	0	0	0	%100

**Member Distributed Loads (BLC 50 : Structure Wo (270 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	M44A	X	-8.663	-8.663	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	-8.663	-8.663	0	%100
56	M44B	Z	0	0	0	%100
57	OVP1	X	-9.448	-9.448	0	%100
58	OVP1	Z	0	0	0	%100

**Member Distributed Loads (BLC 51 : Structure Wo (300 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.476	-2.476	0	%100
2	M1	Z	-1.43	-1.43	0	%100
3	M2	X	-2.476	-2.476	0	%100
4	M2	Z	-1.43	-1.43	0	%100
5	M13	X	-1.615	-1.615	0	%100
6	M13	Z	-.932	-.932	0	%100
7	M14	X	-1.615	-1.615	0	%100
8	M14	Z	-.932	-.932	0	%100
9	M15	X	-1.615	-1.615	0	%100
10	M15	Z	-.932	-.932	0	%100
11	M16	X	-1.615	-1.615	0	%100
12	M16	Z	-.932	-.932	0	%100
13	OVP	X	-5.428	-5.428	0	%100
14	OVP	Z	-3.134	-3.134	0	%100
15	M18	X	-5.428	-5.428	0	%100
16	M18	Z	-3.134	-3.134	0	%100
17	M19	X	-.124	-.124	0	%100
18	M19	Z	-.072	-.072	0	%100
19	M20	X	-.124	-.124	0	%100
20	M20	Z	-.072	-.072	0	%100
21	M21	X	-.538	-.538	0	%100
22	M21	Z	-.311	-.311	0	%100
23	M22	X	-.538	-.538	0	%100
24	M22	Z	-.311	-.311	0	%100
25	M23	X	-.538	-.538	0	%100
26	M23	Z	-.311	-.311	0	%100
27	M24	X	-.538	-.538	0	%100
28	M24	Z	-.311	-.311	0	%100
29	M25	X	-2.454	-2.454	0	%100
30	M25	Z	-1.417	-1.417	0	%100
31	M26	X	-2.454	-2.454	0	%100
32	M26	Z	-1.417	-1.417	0	%100
33	M27	X	-1.672	-1.672	0	%100
34	M27	Z	-.965	-.965	0	%100
35	M28	X	-1.672	-1.672	0	%100
36	M28	Z	-.965	-.965	0	%100
37	MP4A	X	-8.183	-8.183	0	%100
38	MP4A	Z	-4.724	-4.724	0	%100
39	MP3A	X	-8.183	-8.183	0	%100
40	MP3A	Z	-4.724	-4.724	0	%100
41	MP2A	X	-8.183	-8.183	0	%100
42	MP2A	Z	-4.724	-4.724	0	%100
43	MP1A	X	-8.183	-8.183	0	%100
44	MP1A	Z	-4.724	-4.724	0	%100
45	M44	X	-2.153	-2.153	0	%100
46	M44	Z	-1.243	-1.243	0	%100
47	M45	X	-2.153	-2.153	0	%100

**Member Distributed Loads (BLC 51 : Structure Wo (300 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
48	M45	Z	-1.243	-1.243	0	%100
49	M46	X	-2.153	-2.153	0	%100
50	M46	Z	-1.243	-1.243	0	%100
51	M47	X	-2.153	-2.153	0	%100
52	M47	Z	-1.243	-1.243	0	%100
53	M44A	X	-3.842	-3.842	0	%100
54	M44A	Z	-2.218	-2.218	0	%100
55	M44B	X	-7.754	-7.754	0	%100
56	M44B	Z	-4.477	-4.477	0	%100
57	OVP1	X	-8.183	-8.183	0	%100
58	OVP1	Z	-4.724	-4.724	0	%100

**Member Distributed Loads (BLC 52 : Structure Wo (330 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.289	-4.289	0	%100
2	M1	Z	-7.429	-7.429	0	%100
3	M2	X	-4.289	-4.289	0	%100
4	M2	Z	-7.429	-7.429	0	%100
5	M13	X	-.311	-.311	0	%100
6	M13	Z	-.538	-.538	0	%100
7	M14	X	-.311	-.311	0	%100
8	M14	Z	-.538	-.538	0	%100
9	M15	X	-.311	-.311	0	%100
10	M15	Z	-.538	-.538	0	%100
11	M16	X	-.311	-.311	0	%100
12	M16	Z	-.538	-.538	0	%100
13	OVP	X	-3.571	-3.571	0	%100
14	OVP	Z	-6.185	-6.185	0	%100
15	M18	X	-3.571	-3.571	0	%100
16	M18	Z	-6.185	-6.185	0	%100
17	M19	X	-.508	-.508	0	%100
18	M19	Z	-.88	-.88	0	%100
19	M20	X	-.508	-.508	0	%100
20	M20	Z	-.88	-.88	0	%100
21	M21	X	-.932	-.932	0	%100
22	M21	Z	-1.615	-1.615	0	%100
23	M22	X	-.932	-.932	0	%100
24	M22	Z	-1.615	-1.615	0	%100
25	M23	X	-.932	-.932	0	%100
26	M23	Z	-1.615	-1.615	0	%100
27	M24	X	-.932	-.932	0	%100
28	M24	Z	-1.615	-1.615	0	%100
29	M25	X	-1.481	-1.481	0	%100
30	M25	Z	-2.566	-2.566	0	%100
31	M26	X	-1.481	-1.481	0	%100
32	M26	Z	-2.566	-2.566	0	%100
33	M27	X	-1.03	-1.03	0	%100
34	M27	Z	-1.783	-1.783	0	%100
35	M28	X	-1.03	-1.03	0	%100
36	M28	Z	-1.783	-1.783	0	%100
37	MP4A	X	-4.724	-4.724	0	%100
38	MP4A	Z	-8.183	-8.183	0	%100
39	MP3A	X	-4.724	-4.724	0	%100
40	MP3A	Z	-8.183	-8.183	0	%100
41	MP2A	X	-4.724	-4.724	0	%100
42	MP2A	Z	-8.183	-8.183	0	%100

**Member Distributed Loads (BLC 52 : Structure Wo (330 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
43	MP1A	X	-4.724	-4.724	0	%100
44	MP1A	Z	-8.183	-8.183	0	%100
45	M44	X	-1.243	-1.243	0	%100
46	M44	Z	-2.153	-2.153	0	%100
47	M45	X	-1.243	-1.243	0	%100
48	M45	Z	-2.153	-2.153	0	%100
49	M46	X	-1.243	-1.243	0	%100
50	M46	Z	-2.153	-2.153	0	%100
51	M47	X	-1.243	-1.243	0	%100
52	M47	Z	-2.153	-2.153	0	%100
53	M44A	X	-.251	-.251	0	%100
54	M44A	Z	-.435	-.435	0	%100
55	M44B	X	-2.51	-2.51	0	%100
56	M44B	Z	-4.347	-4.347	0	%100
57	OVP1	X	-4.724	-4.724	0	%100
58	OVP1	Z	-8.183	-8.183	0	%100

**Member Distributed Loads (BLC 53 : Structure Wi (0 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	-3.698	-3.698	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-3.698	-3.698	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	-1.604	-1.604	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-1.604	-1.604	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-1.604	-1.604	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-1.604	-1.604	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-1.414	-1.414	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-1.414	-1.414	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-1.414	-1.414	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-1.414	-1.414	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-1.795	-1.795	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-1.795	-1.795	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-1.795	-1.795	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-1.795	-1.795	0	%100
37	MP4A	X	0	0	0	%100

**Member Distributed Loads (BLC 53 : Structure Wi (0 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
38	MP4A	Z	-3.341	-3.341	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-3.341	-3.341	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	-3.341	-3.341	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	-3.341	-3.341	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-1.858	-1.858	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-1.858	-1.858	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-1.858	-1.858	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	-1.858	-1.858	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	-.28	-.28	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	-.28	-.28	0	%100
57	OVP1	X	0	0	0	%100
58	OVP1	Z	-3.341	-3.341	0	%100

**Member Distributed Loads (BLC 54 : Structure Wi (30 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.387	1.387	0	%100
2	M1	Z	-2.402	-2.402	0	%100
3	M2	X	1.387	1.387	0	%100
4	M2	Z	-2.402	-2.402	0	%100
5	M13	X	.176	.176	0	%100
6	M13	Z	-.304	-.304	0	%100
7	M14	X	.176	.176	0	%100
8	M14	Z	-.304	-.304	0	%100
9	M15	X	.176	.176	0	%100
10	M15	Z	-.304	-.304	0	%100
11	M16	X	.176	.176	0	%100
12	M16	Z	-.304	-.304	0	%100
13	OVP	X	.181	.181	0	%100
14	OVP	Z	-.313	-.313	0	%100
15	M18	X	.181	.181	0	%100
16	M18	Z	-.313	-.313	0	%100
17	M19	X	1.268	1.268	0	%100
18	M19	Z	-2.197	-2.197	0	%100
19	M20	X	1.268	1.268	0	%100
20	M20	Z	-2.197	-2.197	0	%100
21	M21	X	.53	.53	0	%100
22	M21	Z	-.918	-.918	0	%100
23	M22	X	.53	.53	0	%100
24	M22	Z	-.918	-.918	0	%100
25	M23	X	.53	.53	0	%100
26	M23	Z	-.918	-.918	0	%100
27	M24	X	.53	.53	0	%100
28	M24	Z	-.918	-.918	0	%100
29	M25	X	.718	.718	0	%100
30	M25	Z	-1.243	-1.243	0	%100
31	M26	X	.718	.718	0	%100
32	M26	Z	-1.243	-1.243	0	%100

**Member Distributed Loads (BLC 54 : Structure Wi (30 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
33	M27	X	1.033	1.033	0	%100
34	M27	Z	-1.789	-1.789	0	%100
35	M28	X	1.033	1.033	0	%100
36	M28	Z	-1.789	-1.789	0	%100
37	MP4A	X	1.67	1.67	0	%100
38	MP4A	Z	-2.893	-2.893	0	%100
39	MP3A	X	1.67	1.67	0	%100
40	MP3A	Z	-2.893	-2.893	0	%100
41	MP2A	X	1.67	1.67	0	%100
42	MP2A	Z	-2.893	-2.893	0	%100
43	MP1A	X	1.67	1.67	0	%100
44	MP1A	Z	-2.893	-2.893	0	%100
45	M44	X	.929	.929	0	%100
46	M44	Z	-1.609	-1.609	0	%100
47	M45	X	.929	.929	0	%100
48	M45	Z	-1.609	-1.609	0	%100
49	M46	X	.929	.929	0	%100
50	M46	Z	-1.609	-1.609	0	%100
51	M47	X	.929	.929	0	%100
52	M47	Z	-1.609	-1.609	0	%100
53	M44A	X	.887	.887	0	%100
54	M44A	Z	-1.537	-1.537	0	%100
55	M44B	X	.089	.089	0	%100
56	M44B	Z	-.154	-.154	0	%100
57	OVP1	X	1.67	1.67	0	%100
58	OVP1	Z	-2.893	-2.893	0	%100

**Member Distributed Loads (BLC 55 : Structure Wi (60 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.801	.801	0	%100
2	M1	Z	-.462	-.462	0	%100
3	M2	X	.801	.801	0	%100
4	M2	Z	-.462	-.462	0	%100
5	M13	X	.913	.913	0	%100
6	M13	Z	-.527	-.527	0	%100
7	M14	X	.913	.913	0	%100
8	M14	Z	-.527	-.527	0	%100
9	M15	X	.913	.913	0	%100
10	M15	Z	-.527	-.527	0	%100
11	M16	X	.913	.913	0	%100
12	M16	Z	-.527	-.527	0	%100
13	OVP	X	.044	.044	0	%100
14	OVP	Z	-.025	-.025	0	%100
15	M18	X	.044	.044	0	%100
16	M18	Z	-.025	-.025	0	%100
17	M19	X	1.928	1.928	0	%100
18	M19	Z	-1.113	-1.113	0	%100
19	M20	X	1.928	1.928	0	%100
20	M20	Z	-1.113	-1.113	0	%100
21	M21	X	.306	.306	0	%100
22	M21	Z	-.177	-.177	0	%100
23	M22	X	.306	.306	0	%100
24	M22	Z	-.177	-.177	0	%100
25	M23	X	.306	.306	0	%100
26	M23	Z	-.177	-.177	0	%100
27	M24	X	.306	.306	0	%100

**Member Distributed Loads (BLC 55 : Structure Wi (60 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
28	M24	Z	-1.177	-1.177	0	%100
29	M25	X	1.165	1.165	0	%100
30	M25	Z	-6.73	-6.73	0	%100
31	M26	X	1.165	1.165	0	%100
32	M26	Z	-6.73	-6.73	0	%100
33	M27	X	1.711	1.711	0	%100
34	M27	Z	-9.88	-9.88	0	%100
35	M28	X	1.711	1.711	0	%100
36	M28	Z	-9.88	-9.88	0	%100
37	MP4A	X	2.893	2.893	0	%100
38	MP4A	Z	-1.67	-1.67	0	%100
39	MP3A	X	2.893	2.893	0	%100
40	MP3A	Z	-1.67	-1.67	0	%100
41	MP2A	X	2.893	2.893	0	%100
42	MP2A	Z	-1.67	-1.67	0	%100
43	MP1A	X	2.893	2.893	0	%100
44	MP1A	Z	-1.67	-1.67	0	%100
45	M44	X	1.609	1.609	0	%100
46	M44	Z	-9.29	-9.29	0	%100
47	M45	X	1.609	1.609	0	%100
48	M45	Z	-9.29	-9.29	0	%100
49	M46	X	1.609	1.609	0	%100
50	M46	Z	-9.29	-9.29	0	%100
51	M47	X	1.609	1.609	0	%100
52	M47	Z	-9.29	-9.29	0	%100
53	M44A	X	2.742	2.742	0	%100
54	M44A	Z	-1.583	-1.583	0	%100
55	M44B	X	1.358	1.358	0	%100
56	M44B	Z	-.784	-.784	0	%100
57	OVP1	X	2.893	2.893	0	%100
58	OVP1	Z	-1.67	-1.67	0	%100

**Member Distributed Loads (BLC 56 : Structure Wi (90 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	1.405	1.405	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	1.405	1.405	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	1.405	1.405	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	1.405	1.405	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	.984	.984	0	%100
14	OVP	Z	0	0	0	%100
15	M18	X	.984	.984	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	.984	.984	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	.984	.984	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100

**Member Distributed Loads (BLC 56 : Structure Wi (90 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	1.616	1.616	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	1.616	1.616	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	1.616	1.616	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	1.616	1.616	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	3.341	3.341	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	3.341	3.341	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	3.341	3.341	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	3.341	3.341	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	1.858	1.858	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	1.858	1.858	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	1.858	1.858	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	1.858	1.858	0	%100
52	M47	Z	0	0	0	%100
53	M44A	X	3.063	3.063	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	3.063	3.063	0	%100
56	M44B	Z	0	0	0	%100
57	OVP1	X	3.341	3.341	0	%100
58	OVP1	Z	0	0	0	%100

**Member Distributed Loads (BLC 57 : Structure Wi (120 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.801	.801	0	%100
2	M1	Z	.462	.462	0	%100
3	M2	X	.801	.801	0	%100
4	M2	Z	.462	.462	0	%100
5	M13	X	.913	.913	0	%100
6	M13	Z	.527	.527	0	%100
7	M14	X	.913	.913	0	%100
8	M14	Z	.527	.527	0	%100
9	M15	X	.913	.913	0	%100
10	M15	Z	.527	.527	0	%100
11	M16	X	.913	.913	0	%100
12	M16	Z	.527	.527	0	%100
13	OVP	X	1.928	1.928	0	%100
14	OVP	Z	1.113	1.113	0	%100
15	M18	X	1.928	1.928	0	%100
16	M18	Z	1.113	1.113	0	%100
17	M19	X	.044	.044	0	%100

**Member Distributed Loads (BLC 57 : Structure Wi (120 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
18	M19	Z	.025	.025	0	%100
19	M20	X	.044	.044	0	%100
20	M20	Z	.025	.025	0	%100
21	M21	X	.306	.306	0	%100
22	M21	Z	.177	.177	0	%100
23	M22	X	.306	.306	0	%100
24	M22	Z	.177	.177	0	%100
25	M23	X	.306	.306	0	%100
26	M23	Z	.177	.177	0	%100
27	M24	X	.306	.306	0	%100
28	M24	Z	.177	.177	0	%100
29	M25	X	1.711	1.711	0	%100
30	M25	Z	.988	.988	0	%100
31	M26	X	1.711	1.711	0	%100
32	M26	Z	.988	.988	0	%100
33	M27	X	1.165	1.165	0	%100
34	M27	Z	.673	.673	0	%100
35	M28	X	1.165	1.165	0	%100
36	M28	Z	.673	.673	0	%100
37	MP4A	X	2.893	2.893	0	%100
38	MP4A	Z	1.67	1.67	0	%100
39	MP3A	X	2.893	2.893	0	%100
40	MP3A	Z	1.67	1.67	0	%100
41	MP2A	X	2.893	2.893	0	%100
42	MP2A	Z	1.67	1.67	0	%100
43	MP1A	X	2.893	2.893	0	%100
44	MP1A	Z	1.67	1.67	0	%100
45	M44	X	1.609	1.609	0	%100
46	M44	Z	.929	.929	0	%100
47	M45	X	1.609	1.609	0	%100
48	M45	Z	.929	.929	0	%100
49	M46	X	1.609	1.609	0	%100
50	M46	Z	.929	.929	0	%100
51	M47	X	1.609	1.609	0	%100
52	M47	Z	.929	.929	0	%100
53	M44A	X	1.358	1.358	0	%100
54	M44A	Z	.784	.784	0	%100
55	M44B	X	2.742	2.742	0	%100
56	M44B	Z	1.583	1.583	0	%100
57	OVP1	X	2.893	2.893	0	%100
58	OVP1	Z	1.67	1.67	0	%100

**Member Distributed Loads (BLC 58 : Structure Wi (150 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.387	1.387	0	%100
2	M1	Z	2.402	2.402	0	%100
3	M2	X	1.387	1.387	0	%100
4	M2	Z	2.402	2.402	0	%100
5	M13	X	.176	.176	0	%100
6	M13	Z	.304	.304	0	%100
7	M14	X	.176	.176	0	%100
8	M14	Z	.304	.304	0	%100
9	M15	X	.176	.176	0	%100
10	M15	Z	.304	.304	0	%100
11	M16	X	.176	.176	0	%100
12	M16	Z	.304	.304	0	%100

**Member Distributed Loads (BLC 58 : Structure Wi (150 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	OVP	X	1.268	1.268	0	%100
14	OVP	Z	2.197	2.197	0	%100
15	M18	X	1.268	1.268	0	%100
16	M18	Z	2.197	2.197	0	%100
17	M19	X	.181	.181	0	%100
18	M19	Z	.313	.313	0	%100
19	M20	X	.181	.181	0	%100
20	M20	Z	.313	.313	0	%100
21	M21	X	.53	.53	0	%100
22	M21	Z	.918	.918	0	%100
23	M22	X	.53	.53	0	%100
24	M22	Z	.918	.918	0	%100
25	M23	X	.53	.53	0	%100
26	M23	Z	.918	.918	0	%100
27	M24	X	.53	.53	0	%100
28	M24	Z	.918	.918	0	%100
29	M25	X	1.033	1.033	0	%100
30	M25	Z	1.789	1.789	0	%100
31	M26	X	1.033	1.033	0	%100
32	M26	Z	1.789	1.789	0	%100
33	M27	X	.718	.718	0	%100
34	M27	Z	1.243	1.243	0	%100
35	M28	X	.718	.718	0	%100
36	M28	Z	1.243	1.243	0	%100
37	MP4A	X	1.67	1.67	0	%100
38	MP4A	Z	2.893	2.893	0	%100
39	MP3A	X	1.67	1.67	0	%100
40	MP3A	Z	2.893	2.893	0	%100
41	MP2A	X	1.67	1.67	0	%100
42	MP2A	Z	2.893	2.893	0	%100
43	MP1A	X	1.67	1.67	0	%100
44	MP1A	Z	2.893	2.893	0	%100
45	M44	X	.929	.929	0	%100
46	M44	Z	1.609	1.609	0	%100
47	M45	X	.929	.929	0	%100
48	M45	Z	1.609	1.609	0	%100
49	M46	X	.929	.929	0	%100
50	M46	Z	1.609	1.609	0	%100
51	M47	X	.929	.929	0	%100
52	M47	Z	1.609	1.609	0	%100
53	M44A	X	.089	.089	0	%100
54	M44A	Z	.154	.154	0	%100
55	M44B	X	.887	.887	0	%100
56	M44B	Z	1.537	1.537	0	%100
57	OVP1	X	1.67	1.67	0	%100
58	OVP1	Z	2.893	2.893	0	%100

**Member Distributed Loads (BLC 59 : Structure Wi (180 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	3.698	3.698	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	3.698	3.698	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100

**Member Distributed Loads (BLC 59 : Structure Wi (180 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	1.604	1.604	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	1.604	1.604	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	1.604	1.604	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	1.604	1.604	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	1.414	1.414	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	1.414	1.414	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	1.414	1.414	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	1.414	1.414	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	1.795	1.795	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	1.795	1.795	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	1.795	1.795	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	1.795	1.795	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	3.341	3.341	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	3.341	3.341	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	3.341	3.341	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	3.341	3.341	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	1.858	1.858	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	1.858	1.858	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	1.858	1.858	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	1.858	1.858	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	.28	.28	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	.28	.28	0	%100
57	OVP1	X	0	0	0	%100
58	OVP1	Z	3.341	3.341	0	%100

**Member Distributed Loads (BLC 60 : Structure Wi (210 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.387	-1.387	0	%100
2	M1	Z	2.402	2.402	0	%100

**Member Distributed Loads (BLC 60 : Structure Wi (210 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
3	M2	X	-1.387	-1.387	0	%100
4	M2	Z	2.402	2.402	0	%100
5	M13	X	-.176	-.176	0	%100
6	M13	Z	.304	.304	0	%100
7	M14	X	-.176	-.176	0	%100
8	M14	Z	.304	.304	0	%100
9	M15	X	-.176	-.176	0	%100
10	M15	Z	.304	.304	0	%100
11	M16	X	-.176	-.176	0	%100
12	M16	Z	.304	.304	0	%100
13	OVP	X	-.181	-.181	0	%100
14	OVP	Z	.313	.313	0	%100
15	M18	X	-.181	-.181	0	%100
16	M18	Z	.313	.313	0	%100
17	M19	X	-1.268	-1.268	0	%100
18	M19	Z	2.197	2.197	0	%100
19	M20	X	-1.268	-1.268	0	%100
20	M20	Z	2.197	2.197	0	%100
21	M21	X	-.53	-.53	0	%100
22	M21	Z	.918	.918	0	%100
23	M22	X	-.53	-.53	0	%100
24	M22	Z	.918	.918	0	%100
25	M23	X	-.53	-.53	0	%100
26	M23	Z	.918	.918	0	%100
27	M24	X	-.53	-.53	0	%100
28	M24	Z	.918	.918	0	%100
29	M25	X	-.718	-.718	0	%100
30	M25	Z	1.243	1.243	0	%100
31	M26	X	-.718	-.718	0	%100
32	M26	Z	1.243	1.243	0	%100
33	M27	X	-1.033	-1.033	0	%100
34	M27	Z	1.789	1.789	0	%100
35	M28	X	-1.033	-1.033	0	%100
36	M28	Z	1.789	1.789	0	%100
37	MP4A	X	-1.67	-1.67	0	%100
38	MP4A	Z	2.893	2.893	0	%100
39	MP3A	X	-1.67	-1.67	0	%100
40	MP3A	Z	2.893	2.893	0	%100
41	MP2A	X	-1.67	-1.67	0	%100
42	MP2A	Z	2.893	2.893	0	%100
43	MP1A	X	-1.67	-1.67	0	%100
44	MP1A	Z	2.893	2.893	0	%100
45	M44	X	-.929	-.929	0	%100
46	M44	Z	1.609	1.609	0	%100
47	M45	X	-.929	-.929	0	%100
48	M45	Z	1.609	1.609	0	%100
49	M46	X	-.929	-.929	0	%100
50	M46	Z	1.609	1.609	0	%100
51	M47	X	-.929	-.929	0	%100
52	M47	Z	1.609	1.609	0	%100
53	M44A	X	-.887	-.887	0	%100
54	M44A	Z	1.537	1.537	0	%100
55	M44B	X	-.089	-.089	0	%100
56	M44B	Z	.154	.154	0	%100
57	OVP1	X	-1.67	-1.67	0	%100
58	OVP1	Z	2.893	2.893	0	%100

**Member Distributed Loads (BLC 61 : Structure Wi (240 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-801	-801	0	%100
2	M1	Z	.462	.462	0	%100
3	M2	X	-801	-801	0	%100
4	M2	Z	.462	.462	0	%100
5	M13	X	-913	-913	0	%100
6	M13	Z	.527	.527	0	%100
7	M14	X	-913	-913	0	%100
8	M14	Z	.527	.527	0	%100
9	M15	X	-913	-913	0	%100
10	M15	Z	.527	.527	0	%100
11	M16	X	-913	-913	0	%100
12	M16	Z	.527	.527	0	%100
13	OVP	X	-.044	-.044	0	%100
14	OVP	Z	.025	.025	0	%100
15	M18	X	-.044	-.044	0	%100
16	M18	Z	.025	.025	0	%100
17	M19	X	-1.928	-1.928	0	%100
18	M19	Z	1.113	1.113	0	%100
19	M20	X	-1.928	-1.928	0	%100
20	M20	Z	1.113	1.113	0	%100
21	M21	X	-.306	-.306	0	%100
22	M21	Z	.177	.177	0	%100
23	M22	X	-.306	-.306	0	%100
24	M22	Z	.177	.177	0	%100
25	M23	X	-.306	-.306	0	%100
26	M23	Z	.177	.177	0	%100
27	M24	X	-.306	-.306	0	%100
28	M24	Z	.177	.177	0	%100
29	M25	X	-1.165	-1.165	0	%100
30	M25	Z	.673	.673	0	%100
31	M26	X	-1.165	-1.165	0	%100
32	M26	Z	.673	.673	0	%100
33	M27	X	-1.711	-1.711	0	%100
34	M27	Z	.988	.988	0	%100
35	M28	X	-1.711	-1.711	0	%100
36	M28	Z	.988	.988	0	%100
37	MP4A	X	-2.893	-2.893	0	%100
38	MP4A	Z	1.67	1.67	0	%100
39	MP3A	X	-2.893	-2.893	0	%100
40	MP3A	Z	1.67	1.67	0	%100
41	MP2A	X	-2.893	-2.893	0	%100
42	MP2A	Z	1.67	1.67	0	%100
43	MP1A	X	-2.893	-2.893	0	%100
44	MP1A	Z	1.67	1.67	0	%100
45	M44	X	-1.609	-1.609	0	%100
46	M44	Z	.929	.929	0	%100
47	M45	X	-1.609	-1.609	0	%100
48	M45	Z	.929	.929	0	%100
49	M46	X	-1.609	-1.609	0	%100
50	M46	Z	.929	.929	0	%100
51	M47	X	-1.609	-1.609	0	%100
52	M47	Z	.929	.929	0	%100
53	M44A	X	-2.742	-2.742	0	%100
54	M44A	Z	1.583	1.583	0	%100
55	M44B	X	-1.358	-1.358	0	%100
56	M44B	Z	.784	.784	0	%100
57	OVP1	X	-2.893	-2.893	0	%100

**Member Distributed Loads (BLC 61 : Structure Wi (240 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	OVP1	Z	1.67	1.67	0	%100

**Member Distributed Loads (BLC 62 : Structure Wi (270 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-1.405	-1.405	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-1.405	-1.405	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-1.405	-1.405	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-1.405	-1.405	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	-0.984	-0.984	0	%100
14	OVP	Z	0	0	0	%100
15	M18	X	-0.984	-0.984	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-0.984	-0.984	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-0.984	-0.984	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-1.616	-1.616	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-1.616	-1.616	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-1.616	-1.616	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-1.616	-1.616	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	-3.341	-3.341	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	-3.341	-3.341	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	-3.341	-3.341	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	-3.341	-3.341	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	-1.858	-1.858	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-1.858	-1.858	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-1.858	-1.858	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	-1.858	-1.858	0	%100
52	M47	Z	0	0	0	%100

**Member Distributed Loads (BLC 62 : Structure Wi (270 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	M44A	X	-3.063	-3.063	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	-3.063	-3.063	0	%100
56	M44B	Z	0	0	0	%100
57	OVP1	X	-3.341	-3.341	0	%100
58	OVP1	Z	0	0	0	%100

**Member Distributed Loads (BLC 63 : Structure Wi (300 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-801	-801	0	%100
2	M1	Z	-462	-462	0	%100
3	M2	X	-801	-801	0	%100
4	M2	Z	-462	-462	0	%100
5	M13	X	-913	-913	0	%100
6	M13	Z	-527	-527	0	%100
7	M14	X	-913	-913	0	%100
8	M14	Z	-527	-527	0	%100
9	M15	X	-913	-913	0	%100
10	M15	Z	-527	-527	0	%100
11	M16	X	-913	-913	0	%100
12	M16	Z	-527	-527	0	%100
13	OVP	X	-1.928	-1.928	0	%100
14	OVP	Z	-1.113	-1.113	0	%100
15	M18	X	-1.928	-1.928	0	%100
16	M18	Z	-1.113	-1.113	0	%100
17	M19	X	-0.044	-0.044	0	%100
18	M19	Z	-0.025	-0.025	0	%100
19	M20	X	-0.044	-0.044	0	%100
20	M20	Z	-0.025	-0.025	0	%100
21	M21	X	-0.306	-0.306	0	%100
22	M21	Z	-0.177	-0.177	0	%100
23	M22	X	-0.306	-0.306	0	%100
24	M22	Z	-0.177	-0.177	0	%100
25	M23	X	-0.306	-0.306	0	%100
26	M23	Z	-0.177	-0.177	0	%100
27	M24	X	-0.306	-0.306	0	%100
28	M24	Z	-0.177	-0.177	0	%100
29	M25	X	-1.711	-1.711	0	%100
30	M25	Z	-0.988	-0.988	0	%100
31	M26	X	-1.711	-1.711	0	%100
32	M26	Z	-0.988	-0.988	0	%100
33	M27	X	-1.165	-1.165	0	%100
34	M27	Z	-0.673	-0.673	0	%100
35	M28	X	-1.165	-1.165	0	%100
36	M28	Z	-0.673	-0.673	0	%100
37	MP4A	X	-2.893	-2.893	0	%100
38	MP4A	Z	-1.67	-1.67	0	%100
39	MP3A	X	-2.893	-2.893	0	%100
40	MP3A	Z	-1.67	-1.67	0	%100
41	MP2A	X	-2.893	-2.893	0	%100
42	MP2A	Z	-1.67	-1.67	0	%100
43	MP1A	X	-2.893	-2.893	0	%100
44	MP1A	Z	-1.67	-1.67	0	%100
45	M44	X	-1.609	-1.609	0	%100
46	M44	Z	-0.929	-0.929	0	%100
47	M45	X	-1.609	-1.609	0	%100

**Member Distributed Loads (BLC 63 : Structure Wi (300 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
48	M45	Z	-929	-929	0	%100
49	M46	X	-1.609	-1.609	0	%100
50	M46	Z	-929	-929	0	%100
51	M47	X	-1.609	-1.609	0	%100
52	M47	Z	-929	-929	0	%100
53	M44A	X	-1.358	-1.358	0	%100
54	M44A	Z	-.784	-.784	0	%100
55	M44B	X	-2.742	-2.742	0	%100
56	M44B	Z	-1.583	-1.583	0	%100
57	OVP1	X	-2.893	-2.893	0	%100
58	OVP1	Z	-1.67	-1.67	0	%100

**Member Distributed Loads (BLC 64 : Structure Wi (330 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.387	-1.387	0	%100
2	M1	Z	-2.402	-2.402	0	%100
3	M2	X	-1.387	-1.387	0	%100
4	M2	Z	-2.402	-2.402	0	%100
5	M13	X	-.176	-.176	0	%100
6	M13	Z	-.304	-.304	0	%100
7	M14	X	-.176	-.176	0	%100
8	M14	Z	-.304	-.304	0	%100
9	M15	X	-.176	-.176	0	%100
10	M15	Z	-.304	-.304	0	%100
11	M16	X	-.176	-.176	0	%100
12	M16	Z	-.304	-.304	0	%100
13	OVP	X	-1.268	-1.268	0	%100
14	OVP	Z	-2.197	-2.197	0	%100
15	M18	X	-1.268	-1.268	0	%100
16	M18	Z	-2.197	-2.197	0	%100
17	M19	X	-.181	-.181	0	%100
18	M19	Z	-.313	-.313	0	%100
19	M20	X	-.181	-.181	0	%100
20	M20	Z	-.313	-.313	0	%100
21	M21	X	-.53	-.53	0	%100
22	M21	Z	-.918	-.918	0	%100
23	M22	X	-.53	-.53	0	%100
24	M22	Z	-.918	-.918	0	%100
25	M23	X	-.53	-.53	0	%100
26	M23	Z	-.918	-.918	0	%100
27	M24	X	-.53	-.53	0	%100
28	M24	Z	-.918	-.918	0	%100
29	M25	X	-1.033	-1.033	0	%100
30	M25	Z	-1.789	-1.789	0	%100
31	M26	X	-1.033	-1.033	0	%100
32	M26	Z	-1.789	-1.789	0	%100
33	M27	X	-.718	-.718	0	%100
34	M27	Z	-1.243	-1.243	0	%100
35	M28	X	-.718	-.718	0	%100
36	M28	Z	-1.243	-1.243	0	%100
37	MP4A	X	-1.67	-1.67	0	%100
38	MP4A	Z	-2.893	-2.893	0	%100
39	MP3A	X	-1.67	-1.67	0	%100
40	MP3A	Z	-2.893	-2.893	0	%100
41	MP2A	X	-1.67	-1.67	0	%100
42	MP2A	Z	-2.893	-2.893	0	%100

**Member Distributed Loads (BLC 64 : Structure Wi (330 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
43	MP1A	X	-1.67	-1.67	0	%100
44	MP1A	Z	-2.893	-2.893	0	%100
45	M44	X	-.929	-.929	0	%100
46	M44	Z	-1.609	-1.609	0	%100
47	M45	X	-.929	-.929	0	%100
48	M45	Z	-1.609	-1.609	0	%100
49	M46	X	-.929	-.929	0	%100
50	M46	Z	-1.609	-1.609	0	%100
51	M47	X	-.929	-.929	0	%100
52	M47	Z	-1.609	-1.609	0	%100
53	M44A	X	-.089	-.089	0	%100
54	M44A	Z	-.154	-.154	0	%100
55	M44B	X	-.887	-.887	0	%100
56	M44B	Z	-1.537	-1.537	0	%100
57	OVP1	X	-1.67	-1.67	0	%100
58	OVP1	Z	-2.893	-2.893	0	%100

**Member Distributed Loads (BLC 65 : Structure Wm (0 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.739	-.739	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	-.739	-.739	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	-.292	-.292	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	-.292	-.292	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	-.292	-.292	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	-.292	-.292	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	-.161	-.161	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	-.161	-.161	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	-.161	-.161	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-.161	-.161	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	-.166	-.166	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	-.166	-.166	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	-.166	-.166	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	-.166	-.166	0	%100
37	MP4A	X	0	0	0	%100

**Member Distributed Loads (BLC 65 : Structure Wm (0 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
38	MP4A	Z	-611	-611	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	-611	-611	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	-611	-611	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	-611	-611	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	-161	-161	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	-161	-161	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	-161	-161	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	-161	-161	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	-051	-051	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	-051	-051	0	%100
57	OVP1	X	0	0	0	%100
58	OVP1	Z	-611	-611	0	%100

**Member Distributed Loads (BLC 66 : Structure Wm (30 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.277	.277	0	%100
2	M1	Z	-.48	-.48	0	%100
3	M2	X	.277	.277	0	%100
4	M2	Z	-.48	-.48	0	%100
5	M13	X	.02	.02	0	%100
6	M13	Z	-.035	-.035	0	%100
7	M14	X	.02	.02	0	%100
8	M14	Z	-.035	-.035	0	%100
9	M15	X	.02	.02	0	%100
10	M15	Z	-.035	-.035	0	%100
11	M16	X	.02	.02	0	%100
12	M16	Z	-.035	-.035	0	%100
13	OVP	X	.033	.033	0	%100
14	OVP	Z	-.057	-.057	0	%100
15	M18	X	.033	.033	0	%100
16	M18	Z	-.057	-.057	0	%100
17	M19	X	.231	.231	0	%100
18	M19	Z	-.4	-.4	0	%100
19	M20	X	.231	.231	0	%100
20	M20	Z	-.4	-.4	0	%100
21	M21	X	.06	.06	0	%100
22	M21	Z	-.104	-.104	0	%100
23	M22	X	.06	.06	0	%100
24	M22	Z	-.104	-.104	0	%100
25	M23	X	.06	.06	0	%100
26	M23	Z	-.104	-.104	0	%100
27	M24	X	.06	.06	0	%100
28	M24	Z	-.104	-.104	0	%100
29	M25	X	.067	.067	0	%100
30	M25	Z	-.115	-.115	0	%100
31	M26	X	.067	.067	0	%100
32	M26	Z	-.115	-.115	0	%100

**Member Distributed Loads (BLC 66 : Structure Wm (30 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
33	M27	X	.096	.096	0	%100
34	M27	Z	-.166	-.166	0	%100
35	M28	X	.096	.096	0	%100
36	M28	Z	-.166	-.166	0	%100
37	MP4A	X	.305	.305	0	%100
38	MP4A	Z	-.529	-.529	0	%100
39	MP3A	X	.305	.305	0	%100
40	MP3A	Z	-.529	-.529	0	%100
41	MP2A	X	.305	.305	0	%100
42	MP2A	Z	-.529	-.529	0	%100
43	MP1A	X	.305	.305	0	%100
44	MP1A	Z	-.529	-.529	0	%100
45	M44	X	.08	.08	0	%100
46	M44	Z	-.139	-.139	0	%100
47	M45	X	.08	.08	0	%100
48	M45	Z	-.139	-.139	0	%100
49	M46	X	.08	.08	0	%100
50	M46	Z	-.139	-.139	0	%100
51	M47	X	.08	.08	0	%100
52	M47	Z	-.139	-.139	0	%100
53	M44A	X	.162	.162	0	%100
54	M44A	Z	-.281	-.281	0	%100
55	M44B	X	.016	.016	0	%100
56	M44B	Z	-.028	-.028	0	%100
57	OVP1	X	.305	.305	0	%100
58	OVP1	Z	-.529	-.529	0	%100

**Member Distributed Loads (BLC 67 : Structure Wm (60 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.16	.16	0	%100
2	M1	Z	-.092	-.092	0	%100
3	M2	X	.16	.16	0	%100
4	M2	Z	-.092	-.092	0	%100
5	M13	X	.104	.104	0	%100
6	M13	Z	-.06	-.06	0	%100
7	M14	X	.104	.104	0	%100
8	M14	Z	-.06	-.06	0	%100
9	M15	X	.104	.104	0	%100
10	M15	Z	-.06	-.06	0	%100
11	M16	X	.104	.104	0	%100
12	M16	Z	-.06	-.06	0	%100
13	OVP	X	.008	.008	0	%100
14	OVP	Z	-.005	-.005	0	%100
15	M18	X	.008	.008	0	%100
16	M18	Z	-.005	-.005	0	%100
17	M19	X	.351	.351	0	%100
18	M19	Z	-.203	-.203	0	%100
19	M20	X	.351	.351	0	%100
20	M20	Z	-.203	-.203	0	%100
21	M21	X	.035	.035	0	%100
22	M21	Z	-.02	-.02	0	%100
23	M22	X	.035	.035	0	%100
24	M22	Z	-.02	-.02	0	%100
25	M23	X	.035	.035	0	%100
26	M23	Z	-.02	-.02	0	%100
27	M24	X	.035	.035	0	%100

**Member Distributed Loads (BLC 67 : Structure Wm (60 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
28	M24	Z	-.02	-.02	0	%100
29	M25	X	.108	.108	0	%100
30	M25	Z	-.062	-.062	0	%100
31	M26	X	.108	.108	0	%100
32	M26	Z	-.062	-.062	0	%100
33	M27	X	.159	.159	0	%100
34	M27	Z	-.092	-.092	0	%100
35	M28	X	.159	.159	0	%100
36	M28	Z	-.092	-.092	0	%100
37	MP4A	X	.529	.529	0	%100
38	MP4A	Z	-.305	-.305	0	%100
39	MP3A	X	.529	.529	0	%100
40	MP3A	Z	-.305	-.305	0	%100
41	MP2A	X	.529	.529	0	%100
42	MP2A	Z	-.305	-.305	0	%100
43	MP1A	X	.529	.529	0	%100
44	MP1A	Z	-.305	-.305	0	%100
45	M44	X	.139	.139	0	%100
46	M44	Z	-.08	-.08	0	%100
47	M45	X	.139	.139	0	%100
48	M45	Z	-.08	-.08	0	%100
49	M46	X	.139	.139	0	%100
50	M46	Z	-.08	-.08	0	%100
51	M47	X	.139	.139	0	%100
52	M47	Z	-.08	-.08	0	%100
53	M44A	X	.501	.501	0	%100
54	M44A	Z	-.289	-.289	0	%100
55	M44B	X	.248	.248	0	%100
56	M44B	Z	-.143	-.143	0	%100
57	OVP1	X	.529	.529	0	%100
58	OVP1	Z	-.305	-.305	0	%100

**Member Distributed Loads (BLC 68 : Structure Wm (90 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	.161	.161	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	.161	.161	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	.161	.161	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	.161	.161	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	.179	.179	0	%100
14	OVP	Z	0	0	0	%100
15	M18	X	.179	.179	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	.179	.179	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	.179	.179	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100

**Member Distributed Loads (BLC 68 : Structure Wm (90 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	.15	.15	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	.15	.15	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	.15	.15	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	.15	.15	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	.611	.611	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	.611	.611	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	.611	.611	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	.611	.611	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	.161	.161	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	.161	.161	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	.161	.161	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	.161	.161	0	%100
52	M47	Z	0	0	0	%100
53	M44A	X	.56	.56	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	.56	.56	0	%100
56	M44B	Z	0	0	0	%100
57	OVP1	X	.611	.611	0	%100
58	OVP1	Z	0	0	0	%100

**Member Distributed Loads (BLC 69 : Structure Wm (120 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.16	.16	0	%100
2	M1	Z	.092	.092	0	%100
3	M2	X	.16	.16	0	%100
4	M2	Z	.092	.092	0	%100
5	M13	X	.104	.104	0	%100
6	M13	Z	.06	.06	0	%100
7	M14	X	.104	.104	0	%100
8	M14	Z	.06	.06	0	%100
9	M15	X	.104	.104	0	%100
10	M15	Z	.06	.06	0	%100
11	M16	X	.104	.104	0	%100
12	M16	Z	.06	.06	0	%100
13	OVP	X	.351	.351	0	%100
14	OVP	Z	.203	.203	0	%100
15	M18	X	.351	.351	0	%100
16	M18	Z	.203	.203	0	%100
17	M19	X	.008	.008	0	%100

**Member Distributed Loads (BLC 69 : Structure Wm (120 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
18	M19	Z	.005	.005	0	%100
19	M20	X	.008	.008	0	%100
20	M20	Z	.005	.005	0	%100
21	M21	X	.035	.035	0	%100
22	M21	Z	.02	.02	0	%100
23	M22	X	.035	.035	0	%100
24	M22	Z	.02	.02	0	%100
25	M23	X	.035	.035	0	%100
26	M23	Z	.02	.02	0	%100
27	M24	X	.035	.035	0	%100
28	M24	Z	.02	.02	0	%100
29	M25	X	.159	.159	0	%100
30	M25	Z	.092	.092	0	%100
31	M26	X	.159	.159	0	%100
32	M26	Z	.092	.092	0	%100
33	M27	X	.108	.108	0	%100
34	M27	Z	.062	.062	0	%100
35	M28	X	.108	.108	0	%100
36	M28	Z	.062	.062	0	%100
37	MP4A	X	.529	.529	0	%100
38	MP4A	Z	.305	.305	0	%100
39	MP3A	X	.529	.529	0	%100
40	MP3A	Z	.305	.305	0	%100
41	MP2A	X	.529	.529	0	%100
42	MP2A	Z	.305	.305	0	%100
43	MP1A	X	.529	.529	0	%100
44	MP1A	Z	.305	.305	0	%100
45	M44	X	.139	.139	0	%100
46	M44	Z	.08	.08	0	%100
47	M45	X	.139	.139	0	%100
48	M45	Z	.08	.08	0	%100
49	M46	X	.139	.139	0	%100
50	M46	Z	.08	.08	0	%100
51	M47	X	.139	.139	0	%100
52	M47	Z	.08	.08	0	%100
53	M44A	X	.248	.248	0	%100
54	M44A	Z	.143	.143	0	%100
55	M44B	X	.501	.501	0	%100
56	M44B	Z	.289	.289	0	%100
57	OVP1	X	.529	.529	0	%100
58	OVP1	Z	.305	.305	0	%100

**Member Distributed Loads (BLC 70 : Structure Wm (150 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.277	.277	0	%100
2	M1	Z	.48	.48	0	%100
3	M2	X	.277	.277	0	%100
4	M2	Z	.48	.48	0	%100
5	M13	X	.02	.02	0	%100
6	M13	Z	.035	.035	0	%100
7	M14	X	.02	.02	0	%100
8	M14	Z	.035	.035	0	%100
9	M15	X	.02	.02	0	%100
10	M15	Z	.035	.035	0	%100
11	M16	X	.02	.02	0	%100
12	M16	Z	.035	.035	0	%100

**Member Distributed Loads (BLC 70 : Structure Wm (150 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
13	OVP	X	.231	.231	0	%100
14	OVP	Z	.4	.4	0	%100
15	M18	X	.231	.231	0	%100
16	M18	Z	.4	.4	0	%100
17	M19	X	.033	.033	0	%100
18	M19	Z	.057	.057	0	%100
19	M20	X	.033	.033	0	%100
20	M20	Z	.057	.057	0	%100
21	M21	X	.06	.06	0	%100
22	M21	Z	.104	.104	0	%100
23	M22	X	.06	.06	0	%100
24	M22	Z	.104	.104	0	%100
25	M23	X	.06	.06	0	%100
26	M23	Z	.104	.104	0	%100
27	M24	X	.06	.06	0	%100
28	M24	Z	.104	.104	0	%100
29	M25	X	.096	.096	0	%100
30	M25	Z	.166	.166	0	%100
31	M26	X	.096	.096	0	%100
32	M26	Z	.166	.166	0	%100
33	M27	X	.067	.067	0	%100
34	M27	Z	.115	.115	0	%100
35	M28	X	.067	.067	0	%100
36	M28	Z	.115	.115	0	%100
37	MP4A	X	.305	.305	0	%100
38	MP4A	Z	.529	.529	0	%100
39	MP3A	X	.305	.305	0	%100
40	MP3A	Z	.529	.529	0	%100
41	MP2A	X	.305	.305	0	%100
42	MP2A	Z	.529	.529	0	%100
43	MP1A	X	.305	.305	0	%100
44	MP1A	Z	.529	.529	0	%100
45	M44	X	.08	.08	0	%100
46	M44	Z	.139	.139	0	%100
47	M45	X	.08	.08	0	%100
48	M45	Z	.139	.139	0	%100
49	M46	X	.08	.08	0	%100
50	M46	Z	.139	.139	0	%100
51	M47	X	.08	.08	0	%100
52	M47	Z	.139	.139	0	%100
53	M44A	X	.016	.016	0	%100
54	M44A	Z	.028	.028	0	%100
55	M44B	X	.162	.162	0	%100
56	M44B	Z	.281	.281	0	%100
57	OVP1	X	.305	.305	0	%100
58	OVP1	Z	.529	.529	0	%100

**Member Distributed Loads (BLC 71 : Structure Wm (180 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	.739	.739	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	.739	.739	0	%100
5	M13	X	0	0	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	0	0	0	%100

**Member Distributed Loads (BLC 71 : Structure Wm (180 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
8	M14	Z	0	0	0	%100
9	M15	X	0	0	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	0	0	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	0	0	0	%100
14	OVP	Z	.292	.292	0	%100
15	M18	X	0	0	0	%100
16	M18	Z	.292	.292	0	%100
17	M19	X	0	0	0	%100
18	M19	Z	.292	.292	0	%100
19	M20	X	0	0	0	%100
20	M20	Z	.292	.292	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	.161	.161	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	.161	.161	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	.161	.161	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	.161	.161	0	%100
29	M25	X	0	0	0	%100
30	M25	Z	.166	.166	0	%100
31	M26	X	0	0	0	%100
32	M26	Z	.166	.166	0	%100
33	M27	X	0	0	0	%100
34	M27	Z	.166	.166	0	%100
35	M28	X	0	0	0	%100
36	M28	Z	.166	.166	0	%100
37	MP4A	X	0	0	0	%100
38	MP4A	Z	.611	.611	0	%100
39	MP3A	X	0	0	0	%100
40	MP3A	Z	.611	.611	0	%100
41	MP2A	X	0	0	0	%100
42	MP2A	Z	.611	.611	0	%100
43	MP1A	X	0	0	0	%100
44	MP1A	Z	.611	.611	0	%100
45	M44	X	0	0	0	%100
46	M44	Z	.161	.161	0	%100
47	M45	X	0	0	0	%100
48	M45	Z	.161	.161	0	%100
49	M46	X	0	0	0	%100
50	M46	Z	.161	.161	0	%100
51	M47	X	0	0	0	%100
52	M47	Z	.161	.161	0	%100
53	M44A	X	0	0	0	%100
54	M44A	Z	.051	.051	0	%100
55	M44B	X	0	0	0	%100
56	M44B	Z	.051	.051	0	%100
57	OVP1	X	0	0	0	%100
58	OVP1	Z	.611	.611	0	%100

**Member Distributed Loads (BLC 72 : Structure Wm (210 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.277	-.277	0	%100
2	M1	Z	.48	.48	0	%100

**Member Distributed Loads (BLC 72 : Structure Wm (210 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
3	M2	X	-.277	-.277	0	%100
4	M2	Z	.48	.48	0	%100
5	M13	X	-.02	-.02	0	%100
6	M13	Z	.035	.035	0	%100
7	M14	X	-.02	-.02	0	%100
8	M14	Z	.035	.035	0	%100
9	M15	X	-.02	-.02	0	%100
10	M15	Z	.035	.035	0	%100
11	M16	X	-.02	-.02	0	%100
12	M16	Z	.035	.035	0	%100
13	OVP	X	-.033	-.033	0	%100
14	OVP	Z	.057	.057	0	%100
15	M18	X	-.033	-.033	0	%100
16	M18	Z	.057	.057	0	%100
17	M19	X	-.231	-.231	0	%100
18	M19	Z	.4	.4	0	%100
19	M20	X	-.231	-.231	0	%100
20	M20	Z	.4	.4	0	%100
21	M21	X	-.06	-.06	0	%100
22	M21	Z	.104	.104	0	%100
23	M22	X	-.06	-.06	0	%100
24	M22	Z	.104	.104	0	%100
25	M23	X	-.06	-.06	0	%100
26	M23	Z	.104	.104	0	%100
27	M24	X	-.06	-.06	0	%100
28	M24	Z	.104	.104	0	%100
29	M25	X	-.067	-.067	0	%100
30	M25	Z	.115	.115	0	%100
31	M26	X	-.067	-.067	0	%100
32	M26	Z	.115	.115	0	%100
33	M27	X	-.096	-.096	0	%100
34	M27	Z	.166	.166	0	%100
35	M28	X	-.096	-.096	0	%100
36	M28	Z	.166	.166	0	%100
37	MP4A	X	-.305	-.305	0	%100
38	MP4A	Z	.529	.529	0	%100
39	MP3A	X	-.305	-.305	0	%100
40	MP3A	Z	.529	.529	0	%100
41	MP2A	X	-.305	-.305	0	%100
42	MP2A	Z	.529	.529	0	%100
43	MP1A	X	-.305	-.305	0	%100
44	MP1A	Z	.529	.529	0	%100
45	M44	X	-.08	-.08	0	%100
46	M44	Z	.139	.139	0	%100
47	M45	X	-.08	-.08	0	%100
48	M45	Z	.139	.139	0	%100
49	M46	X	-.08	-.08	0	%100
50	M46	Z	.139	.139	0	%100
51	M47	X	-.08	-.08	0	%100
52	M47	Z	.139	.139	0	%100
53	M44A	X	-.162	-.162	0	%100
54	M44A	Z	.281	.281	0	%100
55	M44B	X	-.016	-.016	0	%100
56	M44B	Z	.028	.028	0	%100
57	OVP1	X	-.305	-.305	0	%100
58	OVP1	Z	.529	.529	0	%100

**Member Distributed Loads (BLC 73 : Structure Wm (240 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.16	-.16	0	%100
2	M1	Z	.092	.092	0	%100
3	M2	X	-.16	-.16	0	%100
4	M2	Z	.092	.092	0	%100
5	M13	X	-.104	-.104	0	%100
6	M13	Z	.06	.06	0	%100
7	M14	X	-.104	-.104	0	%100
8	M14	Z	.06	.06	0	%100
9	M15	X	-.104	-.104	0	%100
10	M15	Z	.06	.06	0	%100
11	M16	X	-.104	-.104	0	%100
12	M16	Z	.06	.06	0	%100
13	OVP	X	-.008	-.008	0	%100
14	OVP	Z	.005	.005	0	%100
15	M18	X	-.008	-.008	0	%100
16	M18	Z	.005	.005	0	%100
17	M19	X	-.351	-.351	0	%100
18	M19	Z	.203	.203	0	%100
19	M20	X	-.351	-.351	0	%100
20	M20	Z	.203	.203	0	%100
21	M21	X	-.035	-.035	0	%100
22	M21	Z	.02	.02	0	%100
23	M22	X	-.035	-.035	0	%100
24	M22	Z	.02	.02	0	%100
25	M23	X	-.035	-.035	0	%100
26	M23	Z	.02	.02	0	%100
27	M24	X	-.035	-.035	0	%100
28	M24	Z	.02	.02	0	%100
29	M25	X	-.108	-.108	0	%100
30	M25	Z	.062	.062	0	%100
31	M26	X	-.108	-.108	0	%100
32	M26	Z	.062	.062	0	%100
33	M27	X	-.159	-.159	0	%100
34	M27	Z	.092	.092	0	%100
35	M28	X	-.159	-.159	0	%100
36	M28	Z	.092	.092	0	%100
37	MP4A	X	-.529	-.529	0	%100
38	MP4A	Z	.305	.305	0	%100
39	MP3A	X	-.529	-.529	0	%100
40	MP3A	Z	.305	.305	0	%100
41	MP2A	X	-.529	-.529	0	%100
42	MP2A	Z	.305	.305	0	%100
43	MP1A	X	-.529	-.529	0	%100
44	MP1A	Z	.305	.305	0	%100
45	M44	X	-.139	-.139	0	%100
46	M44	Z	.08	.08	0	%100
47	M45	X	-.139	-.139	0	%100
48	M45	Z	.08	.08	0	%100
49	M46	X	-.139	-.139	0	%100
50	M46	Z	.08	.08	0	%100
51	M47	X	-.139	-.139	0	%100
52	M47	Z	.08	.08	0	%100
53	M44A	X	-.501	-.501	0	%100
54	M44A	Z	.289	.289	0	%100
55	M44B	X	-.248	-.248	0	%100
56	M44B	Z	.143	.143	0	%100
57	OVP1	X	-.529	-.529	0	%100

**Member Distributed Loads (BLC 73 : Structure Wm (240 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
58	OVP1	Z	.305	.305	0	%100

**Member Distributed Loads (BLC 74 : Structure Wm (270 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	M13	X	-.161	-.161	0	%100
6	M13	Z	0	0	0	%100
7	M14	X	-.161	-.161	0	%100
8	M14	Z	0	0	0	%100
9	M15	X	-.161	-.161	0	%100
10	M15	Z	0	0	0	%100
11	M16	X	-.161	-.161	0	%100
12	M16	Z	0	0	0	%100
13	OVP	X	-.179	-.179	0	%100
14	OVP	Z	0	0	0	%100
15	M18	X	-.179	-.179	0	%100
16	M18	Z	0	0	0	%100
17	M19	X	-.179	-.179	0	%100
18	M19	Z	0	0	0	%100
19	M20	X	-.179	-.179	0	%100
20	M20	Z	0	0	0	%100
21	M21	X	0	0	0	%100
22	M21	Z	0	0	0	%100
23	M22	X	0	0	0	%100
24	M22	Z	0	0	0	%100
25	M23	X	0	0	0	%100
26	M23	Z	0	0	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	M25	X	-.15	-.15	0	%100
30	M25	Z	0	0	0	%100
31	M26	X	-.15	-.15	0	%100
32	M26	Z	0	0	0	%100
33	M27	X	-.15	-.15	0	%100
34	M27	Z	0	0	0	%100
35	M28	X	-.15	-.15	0	%100
36	M28	Z	0	0	0	%100
37	MP4A	X	-.611	-.611	0	%100
38	MP4A	Z	0	0	0	%100
39	MP3A	X	-.611	-.611	0	%100
40	MP3A	Z	0	0	0	%100
41	MP2A	X	-.611	-.611	0	%100
42	MP2A	Z	0	0	0	%100
43	MP1A	X	-.611	-.611	0	%100
44	MP1A	Z	0	0	0	%100
45	M44	X	-.161	-.161	0	%100
46	M44	Z	0	0	0	%100
47	M45	X	-.161	-.161	0	%100
48	M45	Z	0	0	0	%100
49	M46	X	-.161	-.161	0	%100
50	M46	Z	0	0	0	%100
51	M47	X	-.161	-.161	0	%100
52	M47	Z	0	0	0	%100

**Member Distributed Loads (BLC 74 : Structure Wm (270 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
53	M44A	X	-.56	-.56	0	%100
54	M44A	Z	0	0	0	%100
55	M44B	X	-.56	-.56	0	%100
56	M44B	Z	0	0	0	%100
57	OVP1	X	-.611	-.611	0	%100
58	OVP1	Z	0	0	0	%100

**Member Distributed Loads (BLC 75 : Structure Wm (300 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.16	-.16	0	%100
2	M1	Z	-.092	-.092	0	%100
3	M2	X	-.16	-.16	0	%100
4	M2	Z	-.092	-.092	0	%100
5	M13	X	-.104	-.104	0	%100
6	M13	Z	-.06	-.06	0	%100
7	M14	X	-.104	-.104	0	%100
8	M14	Z	-.06	-.06	0	%100
9	M15	X	-.104	-.104	0	%100
10	M15	Z	-.06	-.06	0	%100
11	M16	X	-.104	-.104	0	%100
12	M16	Z	-.06	-.06	0	%100
13	OVP	X	-.351	-.351	0	%100
14	OVP	Z	-.203	-.203	0	%100
15	M18	X	-.351	-.351	0	%100
16	M18	Z	-.203	-.203	0	%100
17	M19	X	-.008	-.008	0	%100
18	M19	Z	-.005	-.005	0	%100
19	M20	X	-.008	-.008	0	%100
20	M20	Z	-.005	-.005	0	%100
21	M21	X	-.035	-.035	0	%100
22	M21	Z	-.02	-.02	0	%100
23	M22	X	-.035	-.035	0	%100
24	M22	Z	-.02	-.02	0	%100
25	M23	X	-.035	-.035	0	%100
26	M23	Z	-.02	-.02	0	%100
27	M24	X	-.035	-.035	0	%100
28	M24	Z	-.02	-.02	0	%100
29	M25	X	-.159	-.159	0	%100
30	M25	Z	-.092	-.092	0	%100
31	M26	X	-.159	-.159	0	%100
32	M26	Z	-.092	-.092	0	%100
33	M27	X	-.108	-.108	0	%100
34	M27	Z	-.062	-.062	0	%100
35	M28	X	-.108	-.108	0	%100
36	M28	Z	-.062	-.062	0	%100
37	MP4A	X	-.529	-.529	0	%100
38	MP4A	Z	-.305	-.305	0	%100
39	MP3A	X	-.529	-.529	0	%100
40	MP3A	Z	-.305	-.305	0	%100
41	MP2A	X	-.529	-.529	0	%100
42	MP2A	Z	-.305	-.305	0	%100
43	MP1A	X	-.529	-.529	0	%100
44	MP1A	Z	-.305	-.305	0	%100
45	M44	X	-.139	-.139	0	%100
46	M44	Z	-.08	-.08	0	%100
47	M45	X	-.139	-.139	0	%100

**Member Distributed Loads (BLC 75 : Structure Wm (300 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
48	M45	Z	-0.08	-0.08	0	%100
49	M46	X	-0.139	-0.139	0	%100
50	M46	Z	-0.08	-0.08	0	%100
51	M47	X	-0.139	-0.139	0	%100
52	M47	Z	-0.08	-0.08	0	%100
53	M44A	X	-0.248	-0.248	0	%100
54	M44A	Z	-0.143	-0.143	0	%100
55	M44B	X	-0.501	-0.501	0	%100
56	M44B	Z	-0.289	-0.289	0	%100
57	OVP1	X	-0.529	-0.529	0	%100
58	OVP1	Z	-0.305	-0.305	0	%100

**Member Distributed Loads (BLC 76 : Structure Wm (330 Deg))**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-0.277	-0.277	0	%100
2	M1	Z	-0.48	-0.48	0	%100
3	M2	X	-0.277	-0.277	0	%100
4	M2	Z	-0.48	-0.48	0	%100
5	M13	X	-0.02	-0.02	0	%100
6	M13	Z	-0.035	-0.035	0	%100
7	M14	X	-0.02	-0.02	0	%100
8	M14	Z	-0.035	-0.035	0	%100
9	M15	X	-0.02	-0.02	0	%100
10	M15	Z	-0.035	-0.035	0	%100
11	M16	X	-0.02	-0.02	0	%100
12	M16	Z	-0.035	-0.035	0	%100
13	OVP	X	-0.231	-0.231	0	%100
14	OVP	Z	-0.4	-0.4	0	%100
15	M18	X	-0.231	-0.231	0	%100
16	M18	Z	-0.4	-0.4	0	%100
17	M19	X	-0.033	-0.033	0	%100
18	M19	Z	-0.057	-0.057	0	%100
19	M20	X	-0.033	-0.033	0	%100
20	M20	Z	-0.057	-0.057	0	%100
21	M21	X	-0.06	-0.06	0	%100
22	M21	Z	-0.104	-0.104	0	%100
23	M22	X	-0.06	-0.06	0	%100
24	M22	Z	-0.104	-0.104	0	%100
25	M23	X	-0.06	-0.06	0	%100
26	M23	Z	-0.104	-0.104	0	%100
27	M24	X	-0.06	-0.06	0	%100
28	M24	Z	-0.104	-0.104	0	%100
29	M25	X	-0.096	-0.096	0	%100
30	M25	Z	-0.166	-0.166	0	%100
31	M26	X	-0.096	-0.096	0	%100
32	M26	Z	-0.166	-0.166	0	%100
33	M27	X	-0.067	-0.067	0	%100
34	M27	Z	-0.115	-0.115	0	%100
35	M28	X	-0.067	-0.067	0	%100
36	M28	Z	-0.115	-0.115	0	%100
37	MP4A	X	-0.305	-0.305	0	%100
38	MP4A	Z	-0.529	-0.529	0	%100
39	MP3A	X	-0.305	-0.305	0	%100
40	MP3A	Z	-0.529	-0.529	0	%100
41	MP2A	X	-0.305	-0.305	0	%100
42	MP2A	Z	-0.529	-0.529	0	%100

**Member Distributed Loads (BLC 76 : Structure Wm (330 Deg)) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
43	MP1A	X	-.305	-.305	0	%100
44	MP1A	Z	-.529	-.529	0	%100
45	M44	X	-.08	-.08	0	%100
46	M44	Z	-.139	-.139	0	%100
47	M45	X	-.08	-.08	0	%100
48	M45	Z	-.139	-.139	0	%100
49	M46	X	-.08	-.08	0	%100
50	M46	Z	-.139	-.139	0	%100
51	M47	X	-.08	-.08	0	%100
52	M47	Z	-.139	-.139	0	%100
53	M44A	X	-.016	-.016	0	%100
54	M44A	Z	-.028	-.028	0	%100
55	M44B	X	-.162	-.162	0	%100
56	M44B	Z	-.281	-.281	0	%100
57	OVP1	X	-.305	-.305	0	%100
58	OVP1	Z	-.529	-.529	0	%100

**Member Area Loads**

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
No Data to Print ...						

**Envelope Joint Reactions**

Joint	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC		
1	N35	max	1388.189	46	1055.056	24	1467.045	13	-.138	67	0	75	.248	47
2		min	-489.509	49	330.532	66	-263.625	7	-.451	13	0	1	-.105	49
3	N36	max	1503.245	11	1058.959	19	518.91	7	-.125	1	0	75	.24	47
4		min	-1788.707	5	327.31	74	-1366.822	1	-.446	19	0	1	-.102	49
5	N61A	max	434.682	2	53.18	2	1472.226	2	0	75	0	75	0	75
6		min	-466.209	8	-34.794	8	-1583.627	8	0	1	0	1	0	1
7	N62A	max	518.378	6	58.342	12	1641.143	12	0	75	0	75	0	75
8		min	-485.423	12	-39.898	6	-1756.794	6	0	1	0	1	0	1
9	Totals:	max	1623.083	10	2130.047	24	2277.992	1						
10		min	-1623.083	4	673.56	67	-2277.996	7						

**Envelope AISC 15th(360-16): LRFD Steel Code Checks**

Member	Shape	Code Check	Loc[... LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt...	phi*Mn...	phi*Mn...Cb	Eqn		
1	M1	PIPE 2.5	.257	8.724	44	.083	8.724	31	14558.7...	50715	3.596	3.596	2...H1-1b	
2	M2	PIPE 2.5	.307	3.255	6	.125	8.724	2	14558.7...	50715	3.596	3.596	2...H1-1b	
3	M13	PL5/8X3.5	.188	.422	11	.270	.374	y	5	66184.77	68906.25	.897	5.024	1...H1-1b
4	M14	PL5/8X3.5	.117	0	49	.102	.422	y	2	66184.77	68906.25	.897	5.024	1...H1-1b
5	M15	PL5/8X3.5	.249	0	44	.102	.422	y	12	66184.77	68906.25	.897	5.024	1...H1-1b
6	M16	PL5/8X3.5	.213	.422	3	.259	.422	y	3	66184.77	68906.25	.897	5.024	1...H1-1b
7	OVP	PIPE 2.0	.261	0	5	.074	0		6	31128.25	32130	1.872	1.872	1...H1-1b
8	M18	PIPE 2.0	.099	0	2	.060	0		14	31128.25	32130	1.872	1.872	1...H1-1b
9	M19	PIPE 2.0	.100	0	12	.082	0		47	31128.25	32130	1.872	1.872	1...H1-1b
10	M20	PIPE 2.0	.262	0	3	.070	0		45	31128.25	32130	1.872	1.872	2...H1-1b
11	M21	PL5/8X3.5	.254	.531	24	.099	.443	y	11	67591.76	68906.25	.897	5.024	1...H1-1b
12	M22	PL5/8X3.5	.387	.531	38	.088	.443	y	3	67591.76	68906.25	.897	5.024	1...H1-1b
13	M23	PL5/8X3.5	.287	.531	14	.045	.531	y	1	67591.76	68906.25	.897	5.024	1...H1-1b
14	M24	PL5/8X3.5	.404	.531	48	.051	.133	y	37	67591.76	68906.25	.897	5.024	1...H1-1b
15	M25	SR 0.75	.001	4.167	47	.009	0		6	2863.936	13916.2...	.174	.174	1...H1-1b*
16	M26	SR 0.75	.045	0	18	.016	0		3	2863.936	13916.2...	.174	.174	1...H1-1b*

**Envelope AISC 15th(360-16): LRFD Steel Code Checks (Continued)**

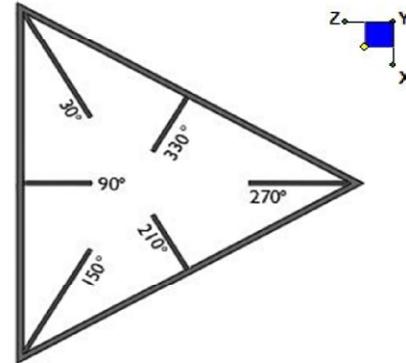
Member	Shape	Code Check	Loc[...]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
17	M27	SR 0.75	.000	0	75	.012	0	47	2863.936	13916.2...	.174	.174	1...	H1-1a
18	M28	SR 0.75	.080	4.167	44	.019	0	11	2863.936	13916.2...	.174	.174	1...	H1-1b*
19	MP4A	PIPE 2.0	.226	5.667	49	.070	2.333	10	14916.0...	32130	1.872	1.872	4...	H1-1b
20	MP3A	PIPE 2.0	.157	2.333	47	.072	2.333	11	14916.0...	32130	1.872	1.872	4...	H1-1b
21	MP2A	PIPE 2.0	.288	2.333	7	.090	5.667	5	14916.0...	32130	1.872	1.872	3...	H1-1b
22	MP1A	PIPE 2.0	.398	2.333	41	.053	4.417	38	14916.0...	32130	1.872	1.872	4...	H1-1b
23	M44	SR 0.625	.058	1.667	12	.013	0	43	2158.269	9664.074	.101	.101	1...	H1-1b
24	M45	SR 0.625	.045	1.667	11	.023	0	11	2158.269	9664.074	.101	.101	1...	H1-1b
25	M46	SR 0.625	.047	1.667	6	.022	0	5	2158.269	9664.074	.101	.101	1...	H1-1b
26	M47	SR 0.625	.111	0	2	.014	0	38	2158.269	9664.074	.101	.101	1...	H1-1b*
27	M44A	PIPE 2.0	.066	5.201	2	.003	0	9	23229.2...	32130	1.872	1.872	1...	H1-1b*
28	M44B	PIPE 2.0	.074	5.201	12	.003	5.201	5	23229.2...	32130	1.872	1.872	1...	H1-1b*
29	OVP1	PIPE 2.0	.078	2.5	11	.076	.833	11	23808.54	32130	1.872	1.872	1...	H1-1b



## I. Mount-to-Tower Connection Check

### RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N35	90
N36	90



TYPICAL PLATFORM

### Tower Connection Bolt Checks

Any moment resistance?:

Bolt Quantity per Reaction:

$d_x$  (in) (Delta X of typ. bolt config. sketch) :

$d_y$  (in) (Delta Y of typ. bolt config. sketch) :

Bolt Type:

Bolt Diameter (in):

Required Tensile Strength (kips):

Required Shear Strength (kips):

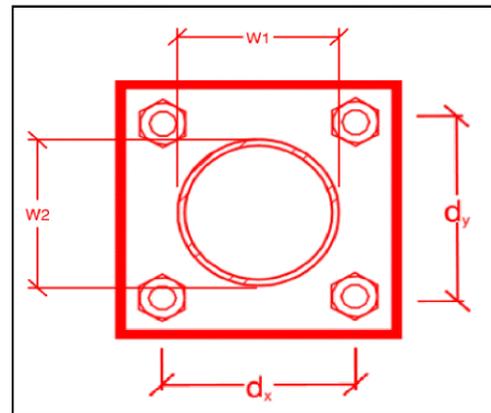
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

Shear Capacity Overall:

yes
4
9.5
2.75
A307
0.625
5.3
2.3
10.0
6.0
13.3%*
9.6%



\*Note: Tension reduction not required if tension or shear capacity < 30%

# Mount Desktop – Post Modification Inspection (PMI) Report Requirements

## Documents & Photos Required from Contractor – **New Mount Passing MA**

Electronic pdf version of this can be downloaded at <https://pmi.vzwsmart.com>

For additional questions and support, please reach out to [pmisupport@colliersengineering.com](mailto:pmisupport@colliersengineering.com)

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**Purpose** – to provide SMART Tool structural vendor the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

- Contractor is responsible for making certain the photos provided as noted below provide confirmation that the installation was completed in accordance with this Passing Mount Analysis.
- Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

### **Base Requirements:**

- If installation will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide “as built mount drawings” showing contractor’s name, contact information, preparer’s signature, and date. Any deviations from the drawings (Proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo should be time and date stamped.
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: <https://pmi.vzwsmart.com>

### **Photo Requirements:**

- Photos taken at ground level
  - Photo of Gate Signs showing the tower owner, site name, and number.
  - Overall tower structure after installation.
  - Photos of the mount after installation; if the mounts are at different rad elevations, pictures must be provided for all elevations that equipment was installed.
- Photos taken at Mount Elevation
  - Photos showing the safety climb wire rope above and below the mount prior to installation.
  - Photos showing the climbing facility and safety climb if present.
  - Photos showing each individual sector after installation of mounts. Each entire sector shall be in one photo to show the interconnection of members.
    - These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.

- Photos that show the model number of each antenna and piece of equipment installed per sector.
- Photos of each installed mount; pictures shall also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
- Photos showing the installed mount elevation.

**Antenna & equipment placement and Geometry Confirmation:**

- The contractor shall certify that the antenna & equipment placement and geometry is in accordance with the sketch and table as included in the mount analysis and noted below.

**Special Instructions / Validation as required from the MA or any other information the contractor deems necessary to share that was identified:**

**Issue:**

Contractor shall remove existing antenna mounts and all associated hardware on each sector and replace with new sector frames (Site Pro 1 Part #: VFA12-HD).

Contractor shall install four (4) 96" long P2 STD mount pipes on each sector, spaced evenly along proposed mount face.

Contractor shall install proposed tiebacks at a maximum of 6" away from the standoff horizontal connections at the top face horizontal on both sides of the mounts. Connect other end of tiebacks to adjacent tower legs.

Contractor shall install proposed OVP unit directly to one (1) new 60" long P2 STD OVP pipe connected to left side standoff horizontals on the Alpha sector using one (1) 1/2" Dia. U-Bolt at each standoff connection.

**Response:**

**Contractor certifies that the climbing facility / safety climb was not damaged or obstructed prior to starting work:**

- Yes       No

**Contractor certifies no new damage/obstructions created during the current installation:**

- Yes       No

**Contractor to certify the condition of the safety climb and verify no obstructions when leaving the site:**

- Safety climb in good condition with no obstructions       Safety Climb Damaged  
 Safety Climb Obstructed

**Comments:**

--

**New Mount Certification:**

- The contractor certifies that the New Mount installed is as specified in the Passing Mount Analysis.
- The contractor notes that the New Mount installed is not as specified and engineering approval was received for the New Mount installed.

**Antenna & equipment placement and Geometry Confirmation:**

- The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

- The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.

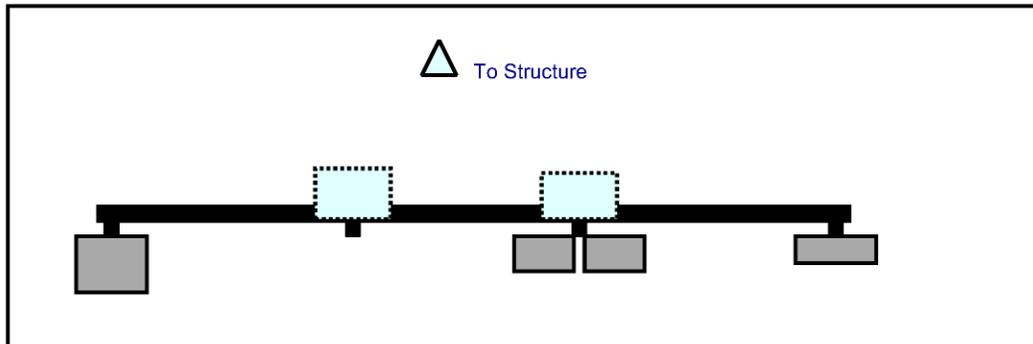
**Special Instruction Confirmation:**

- The contractor has read and acknowledges the above special instructions.

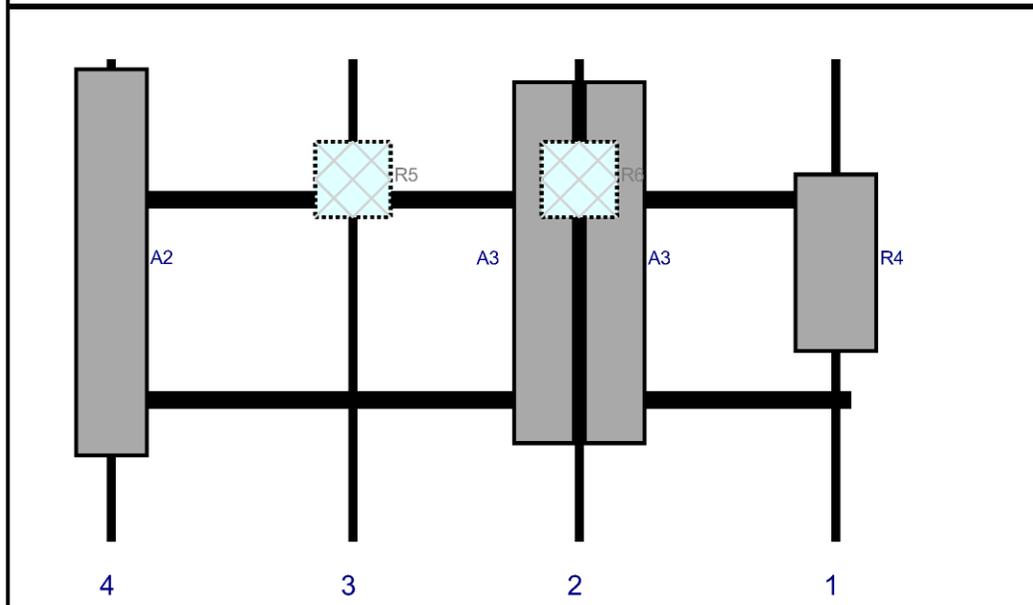
**Certifying Individual:**

Company:	
Employee Name:	
Contact Phone:	
Email:	
Date:	

Plan View

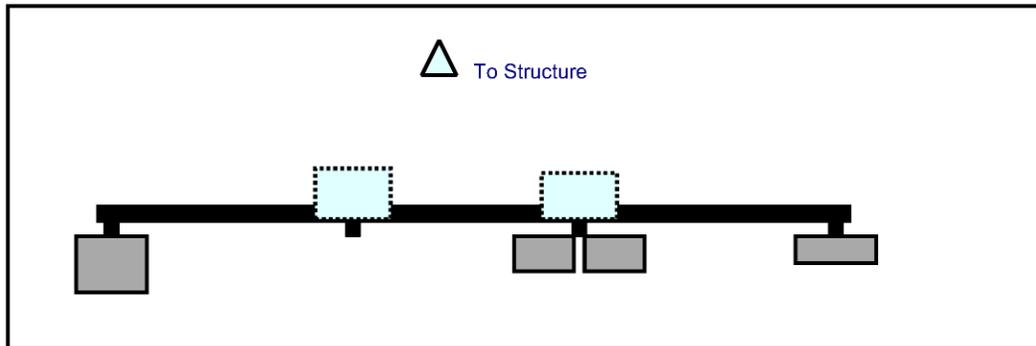


Front View  
Looking at Structure

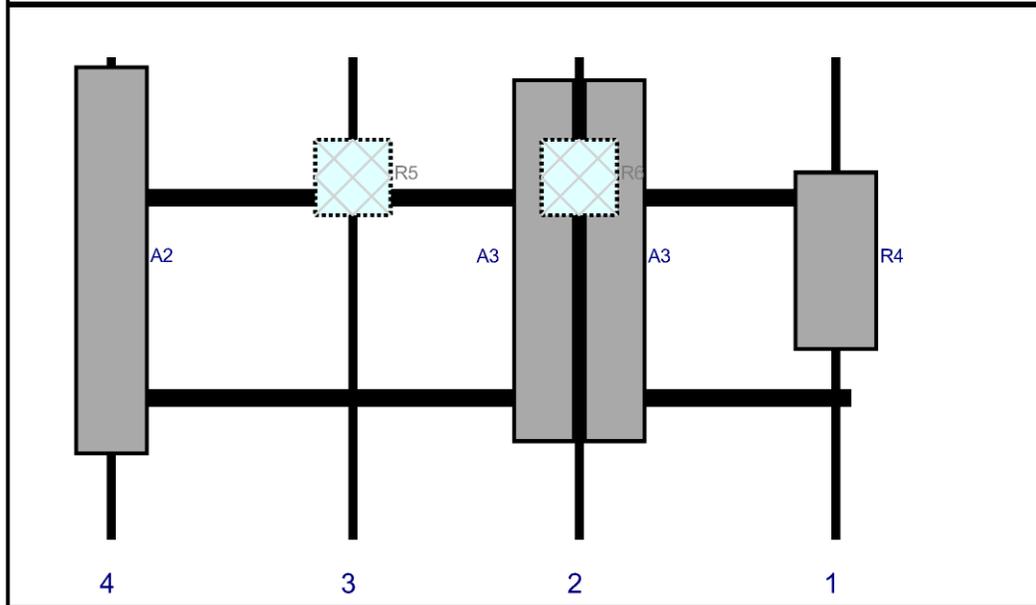


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R4	MT6407-77A	35.1	16.1	147	1	a	Front	40.56	0	Added	
A3	NHH-65B-R2B	72	11.9	96	2	a	Front	40.56	7	Added	
A3	NHH-65B-R2B	72	11.9	96	2	b	Front	40.56	-7	Added	
R6	RF4440d-13A	15	15	96	2	a	Behind	24	0	Added	
R5	RF4439d-25A	15	15	51	3	a	Behind	24	0	Added	
A2	SWCP2X5514	77	14	3	4	a	Front	40.5	0	Retained	01/12/2021

Plan View

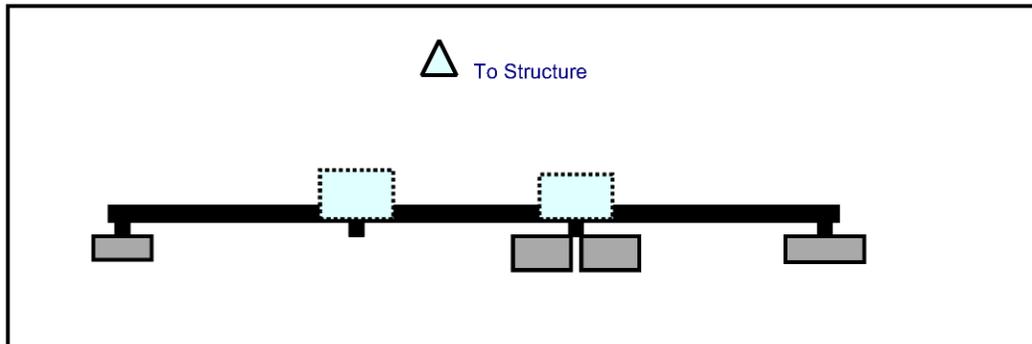


Front View  
Looking at Structure

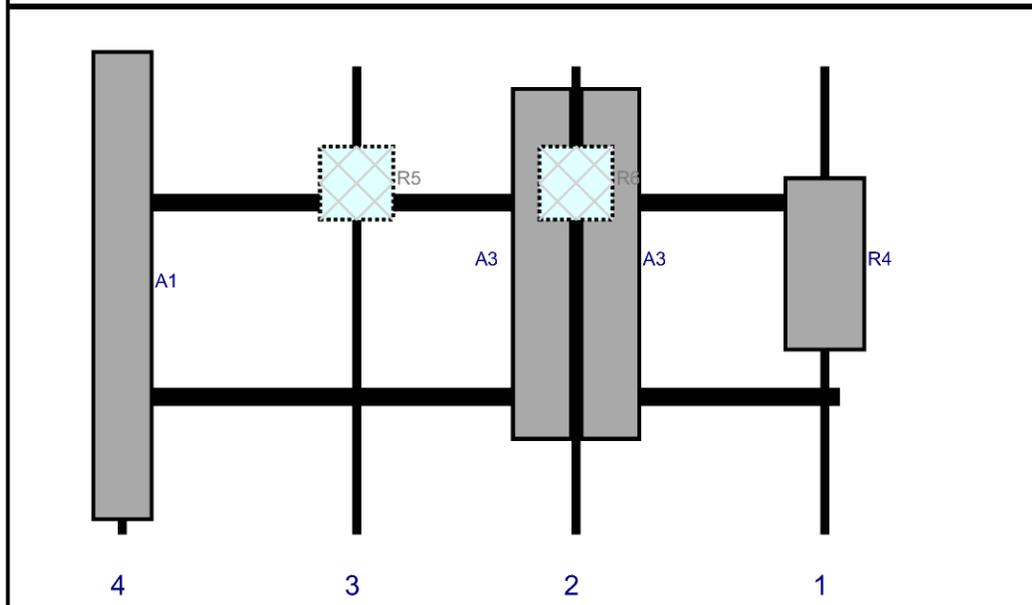


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R4	MT6407-77A	35.1	16.1	147	1	a	Front	40.56	0	Added	
A3	NHH-65B-R2B	72	11.9	96	2	a	Front	40.56	7	Added	
A3	NHH-65B-R2B	72	11.9	96	2	b	Front	40.56	-7	Added	
R6	RF4440d-13A	15	15	96	2	a	Behind	24	0	Added	
R5	RF4439d-25A	15	15	51	3	a	Behind	24	0	Added	
A2	SWCP2X5514	77	14	3	4	a	Front	40.5	0	Retained	01/12/2021

Plan View



Front View  
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
R4	MT6407-77A	35.1	16.1	147	1	a	Front	40.56	0	Added	
A3	NHH-65B-R2B	72	11.9	96	2	a	Front	40.56	7	Added	
A3	NHH-65B-R2B	72	11.9	96	2	b	Front	40.56	-7	Added	
R6	RF4440d-13A	15	15	96	2	a	Behind	24	0	Added	
R5	RF4439d-25A	15	15	51	3	a	Behind	24	0	Added	
A1	LNx-8514DS-VTM	96	11.9	3	4	a	Front	45	0	Retained	01/12/2021

# Maser Consulting Connecticut

**Subject**

TIA-222-H Usage

**Site Information**

Site ID: 468765-VZW / PROSPECT NORTH CT  
Site Name: PROSPECT NORTH CT  
Carrier Name: Verizon Wireless  
Address: 54 Watterbury Rd  
Prospect, Connecticut 06712  
New Haven County  
Latitude: 41.510928°  
Longitude: -72.982327°

**Structure Information**

Tower Type: 160-Ft Self Support  
Mount Type: 12.50-Ft Sector Frame

**FUZE ID # 2011031**

To Whom It May Concern,

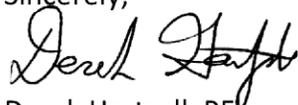
We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

The 2015 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H Standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed maps by ASCE 7 based on updated studies of the wind data.

The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling methods, seismic analysis, 30-degree increment wind directions and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural analysis and is acceptable for use at this site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,



Derek Hartzell, PE  
Technical Specialist

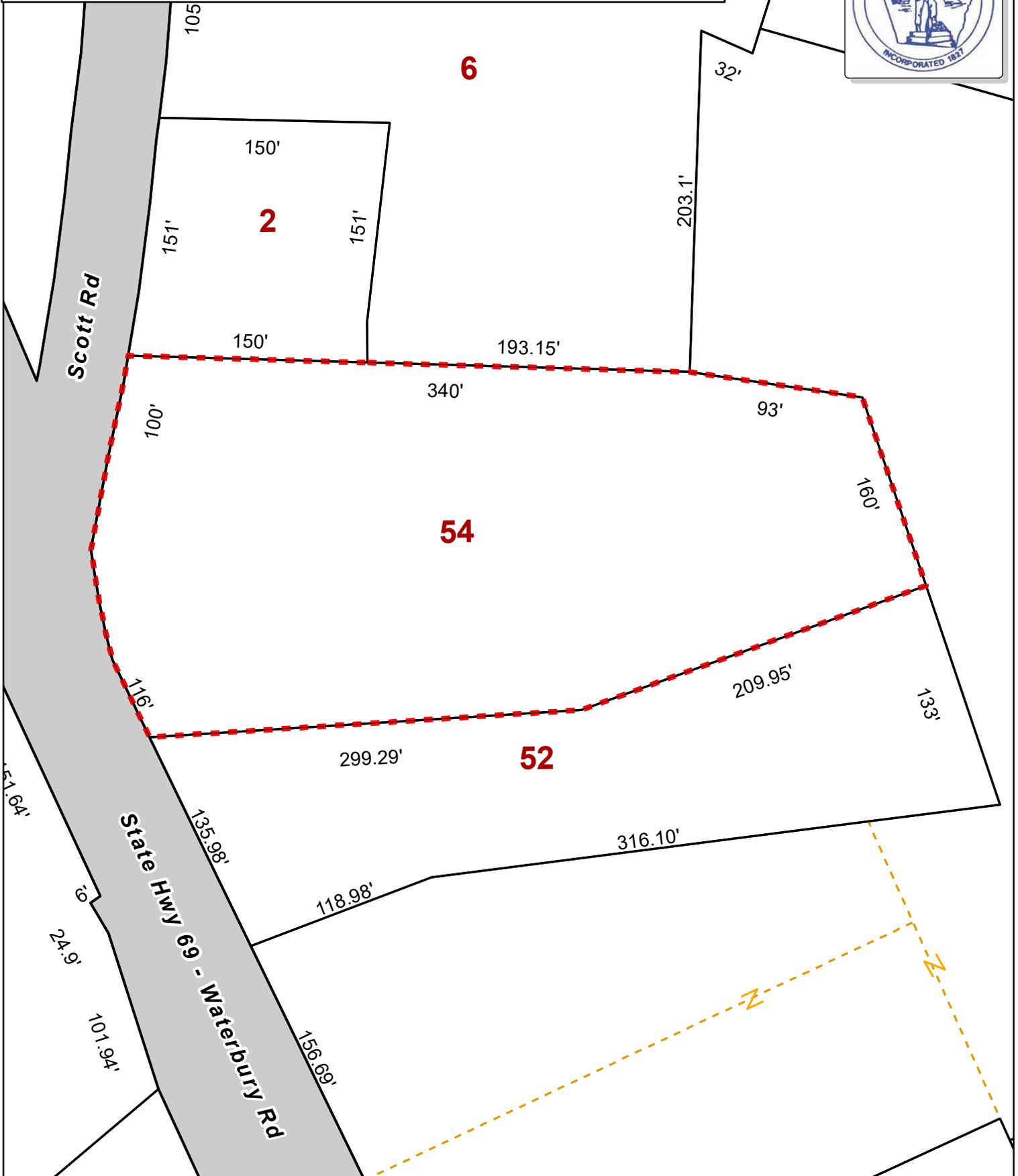
# **ATTACHMENT 5**

# Town of Prospect, Connecticut - Assessment Parcel Map

Unique ID: B0032700

Address: 54 WATERBURY RD

MBL: 109-160-54



Approximate Scale:

1 inch = 100 feet

**Disclaimer:**

This map is for informational purposes only.  
All information is subject to verification by any user.  
The Town of Prospect and its mapping contractors  
assume no legal responsibility for the information contained herein.

Map Produced  
August 2021

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2020.



[www.townofprospect.org](http://www.townofprospect.org)

Information on the Property Records for the Municipality of Prospect was last updated on 9/22/2022.

### Property Summary Information

Parcel Data And Values **Building** ▾ Outbuildings Sales Permits

#### Parcel Information

Location:	54 WATERBURY RD	Property Use:	Residential	Primary Use:	Residential
Unique ID:	B0032700	Map Block Lot:	109 160 54	Acres:	1.9000
490 Acres:	0.00	Zone:	B	Volume / Page:	40/ 413
Developers Map / Lot:		Census:	3471		

#### Value Information

	Appraised Value	Assessed Value
Land	106,722	74,710
Buildings	115,333	80,730
Detached Outbuildings	314,919	220,440
<b>Total</b>	<b>536,974</b>	<b>375,880</b>

#### Owner's Information

Owner's Data
BRADSHAW CHARLES E & AVERYLL B 54 WATERBURY RD PROSPECT, CT 06712

# **ATTACHMENT 6**



PROSPECT NORTH  
Certificate of Mailing — Firm

Name and Address of Sender  Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™  3	Affix Stamp Here <i>Postmark with Date of Receipt.</i>  ZIP 06103 041L12203937
	Postmaster, per (name of receiving employee)  BARILE		

USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Robert Chatfield, Mayor Town of Prospect 36 Center Street Prospect, CT 06712				
2.	Mary Barton, Land Use Inspector Town of Prospect 36 Center Street Prospect, CT 06712				
3.	Charles and Averyll Bradshaw 54 Waterbury Road Prospect, CT 06712				
4.					
5.					
6.					